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Competitive drive in varsity and club collegiate student-athletes: The correlation between motivation, influences, and coach-athlete relationship

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Competitive Drive in Varsity and Club Collegiate Student-Athletes: The Correlation Between Motivation, Influences, and Coach-Athlete Relationship

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DEDICATION

I am dedicating my thesis to my boss and mentor who never gave up on me. Without his encouragement and belief in my abilities I would not have been able to achieve my dream of obtaining a master's degree. I would like to thank Tom Kuster for being such an inspiring, supportive, and enthusiastic mentor. My years as a graduate assistant athletic trainer and graduate student here at James Madison University will always hold a special place in my heart.

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Abstract

The current study explores the factors that drive Division I collegiate athletes to be competitive. Student-athletes from James Madison University, both at the club and varsity levels were surveyed in this study. There were 129 total student athletes that participated (67 males and 62 females). Exactly 89 participants were varsity athletes and 40 were club athletes. Athletes were presented with an in-person survey that included several demographic questions followed by the Task and Ego Orientation in Sport Questionnaire (TEOSQ). The TEOSQ scored athletes on their task and ego orientation during sport participation. The quantitative results of this study do not show a significant correlation between task and ego orientations between male and female athletes at both the varsity and club levels. Independent samples t-tests were run to determine statistical differences between males and females on the task and ego subscales of the TEOSQ. One-way ANOVAs were used to determine if there were any significant differences among task and ego orientation among the three club teams as well as between the varsity teams. There were no significant differences seen except for a *p* value of .010 between varsity men's baseball and varsity women's golf.

Keywords: task orientation, ego orientation, achievement motivation, goal theory, motivation, intrinsic motivation, extrinsic motivation, amotivation, and coach-athlete relationship

CHAPTER 1: INTRODUCTION

Competitive Drive in Varsity and Club Collegiate Student-Athletes: The Correlation between Motivation, Influences, and Coach-Athlete Relationship

Sarkar and Fletcher (2014) could not have said it better, "The sporting arena represents a "natural laboratory" to study how individuals operate and perform in highly demanding circumstances" (p. 1419). Collegiate athletes are exceptional competitors. It is tempting to assume that all collegiate level athletes are motivated, influenced, and coachable in the same ways. The available research has opposed this assumption and made it clear that an athlete's motivation, influences, and coach-athlete relationship is indeed exclusive to the individual athlete's life.

What drives a competitive athlete, you ask? There is no exact answer. Research suggests that what drives competitiveness in athletes as something genuine to that person (Walczak & Tomczak, 2012; Halbrook, Blom, Hurley, Bell, & Holden, 2012; Cremades, Flournoy, & Gomez, 2012). For some collegiate athletes it is the desire to win, the championship ring passed down by their grandfather, or it is just the pure love for the game.

For Jim Abbott it was not just the love of the game, it was the opportunity to overcome a disability. Born without a right hand on September 19, 1967, Jim was expected to struggle. Luckily for him he had educated parents who motivated and pushed him to be like other kids. Abbott never gave up and was driven by his parents, coaches, and friends who believed in his ability to be a competitive baseball player. Needless to say, Abbott was a huge success, he played baseball at the University of Michigan and went on to play for the Los Angeles Angels as well as for the New York Yankees. An

athlete like Jim Abbott proves that competitive drive is different for every athlete, but many core factors seem to be the same. Parents and coaches are generally huge influences, many of these athletes are motivated both by intrinsic and extrinsic factors and are willing and eager to be coached competitively.

The following section will provide and overview of the study. It will include the problem statement, purpose of the study, research questions and hypotheses, assumptions, limitations, scope, significance, and key terms that are related to competitive drive in collegiate athletes.

Problem Statement

After an extensive review of the literature, the problem that I will investigate in this study is the fact that there is little research conducted on the ways the Task and Ego Orientation Questionnaire (TEOSQ) is used in the understanding of an athlete's competitive drive. This lack of literature leads to the problem that is being investigated in this study; competitive drive amongst collegiate athletes is not understood to its fullest potential. The correlation between motivation, influences, and the coach-athlete relationship among collegiate athletes needs further investigation.

People and environments serve as primary motivators for both varsity and club collegiate student athletes. These influences help shape the way an athlete views their achievements and also reveals their competence in the sport they play. Coaches are often unaware of what drives their athletes to be competitive. Coaches can improve their coaching style by knowing whether their athletes are task or ego oriented as well as understanding where their motivation comes from and who their influences are.

Purpose

The purpose of this study was to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. In order to understand and determine an athlete's competitive drive, I considered who and what influences them and what personality traits motivate their achievement in sports. Task versus ego orientation was found to play one of the largest roles in understanding an athlete's achievement, motivation, influences, and competitive character. With this information coaches can greatly improve their coaching styles and relationships with their athletes. In addition to these factors, the following research also identifies correlations between an athlete's gender, specific sport, sport level, and scores on the Task and Ego Orientation in Sport Questionnaire.

Research Question and Hypotheses

The research questions that were investigated in this study are as follows:

RQ 1: Are there differences in task and ego orientations on the TEOSQ between club and varsity athletes at the collegiate level?

RQ 2: Are there differences in task and ego orientations on the TEOSQ between different sports teams?

RQ 3: Is there a higher task orientation among varsity athletes when compared to club athletes on the TEOSQ?

RQ 4: Is there a statistically significant difference between male and female athletes and their task and ego orientation on the TEOSQ?

RQ 5: Is there an overarching influence for both club and varsity athletes?

RQ 6: Are there statistically significant differences between males and females

on the task orientation subscale of the TEOSQ?

RQ 7: Are there statistically significant differences between males and females on the ego orientation subscale of the TEOSQ?

RQ 8: Are there statistically significant differences between club and varsity athletes on the task orientation subscale of the TEOSQ?

RQ 9: Are there statistically significant differences between club and varsity athletes on the ego orientation subscale of the TEOSQ?

RQ 10: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the three club teams?

RQ 11: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the varsity teams?

In addition to the research questions stated above, the following hypotheses will be tested:

H 1: Varsity collegiate athletes are more ego oriented than club sport athletes.

H 2: Overall, male athletes on both varsity and club teams at the collegiate level have higher ego orientation.

The results of this study will be analyzed using a quantitative method. In addition to TEOSQ scores, the responses to gender and specific sport team questions will be utilized to determine the validity of the hypotheses.

Assumptions, Limitations and Scope

In order to maintain the most reliable and valid results I chose to use the varsity and club student athletes at James Madison University (JMU) for this study. I assumed that the varsity and club student athletes at James Madison University would be easily

accessible and would be able to provide me with many responses. JMU has a great sport reputation as well as a high number of both varsity and club student athletes.

It is likely that the student athlete population at JMU will not provide generalizable responses for student athlete populations at other universities. Another limitation in this study is not being able to reach all varsity and club student athletes due to scheduling conflicts. Varsity sport teams have regimented schedules that are regulated by compliance, but club sports are not regulated by compliance and can change their schedules as often as they would like. It was difficult for me to change my schedule as their schedules change or vise-versa.

Due to the possibility of an elevated number of responses, I deemed a quantitative research method would be the most effective way to collect data. This did not allow me to reach deeply into the athletes' experiences, but I was able to obtain valuable information regarding their influences and competitive drive. Paper surveys were provided to varsity and club student athletes between the dates of November 17, 2014 to January 23, 2015. This five-week period allowed me to reach many athletes. According to past researchers, athletes respond better to in person survey distribution.

Significance

Many studies focus on whether an athlete is coachable and how strong the coach-athlete relationship is. What I would like to accomplish at the end of this study is how to utilize the TEOSQ as a way to re-frame the coach-athlete relationship. A better coach-athlete relationship will create a more successful sport environment. Every theorist has a different approach to this research but are all concerned with the same main principles; social, psychological, and behavioral antecedents and consequences of both task and ego

orientation. It is assumed that these goal orientations, task and ego, reflect the criteria individuals use to subjectively define success and failure in achievement settings (Duda, 1989). As stated by Duda (1989), there is a large correlation between an athlete's motivation, influential figures, and their task and ego orientation. This is why the TEOSQ can be utilized as a great analysis tool to determine competitive drive.

The Task and Ego Orientation in Sport Questionnaire (TEOSQ) is a modified design of Nicholls and his colleagues' academic inventory that was used to study the task and ego orientation of athletes (1989). The original idea for the TEOSQ was generated from an inventory given to students to assess their degree of task and ego orientation in the classroom (Duda, 1989). With this information Nicholls was able to transform the scale used for academic orientations to sport orientations. Nicholls and colleagues found similar results between academic and sport scores. The TEOSQ is comprised of 13 statements that are rated on athletes perceived success in sport. Each statement is ranked on a likert scale, 1-5 (1 = Strongly agree to 5 = strongly disagree).

In most cases coaches become one of the largest influential figures that athletes have at the collegiate level. This is a huge responsibility and coaches will be unsuccessful if they do not make an effort to understand the personalities on their teams and make adjustments to their coaching styles and relationships with their athletes.

Key Terms and Definitions

The following table provides the keywords and definitions that will be used throughout my study.

Table 1

Key Terms and Definitions

Keyword	Definition
Task orientation	"A task orientation reflects a dispositional approach to use undifferentiated criteria of ability, such as skill development, mastery and self-improvement, which provide perceptions of success" (Boyd, Kim, Ensari, & Yin, 2014, p. 315).
Ego orientation	"An ego orientation entails a differentiated conception of ability where subjective success is based upon one's capacity to outperform others or demonstrate superior ability" (Boyd, Kim, Ensari, & Yin, 2014, p. 315).
Achievement motivation	One's ability to strive for competence in activities which require them to put forth effort and desire to satisfy one's needs (Schunk, 2012).
Goal theory	Includes a wide array of variables and relationships between goals, expectations, motivations, and abilities (Schunk, 2012, p. 374-375).
Motivation	"Motivation is not observed directly, but rather inferred from behavioral indexes such as verbalizations, task choices, and goal-directed activities. Motivation is an explanatory concept that helps us understand why people behave the way they do" (Schunk, 2012, p. 346).
Intrinsic motivation	Type of motivation that stems from one's internal desires to engage in activities with no reward (Walczak & Tomczak, 2012; Schunk, 2012).
Extrinsic motivation	Type of motivation where an activity is based solely on external factors such as material rewards (Walczak & Tomczak, 2012).

Amotivation	"The term refers to a relative lack of motivation (either intrinsic or extrinsic) and is thus considered to be at the extreme end of the non-self determined continuum" (Horn, Bloom, Berglund & Packard, 2011, p. 193)
Coach-athlete relationship	"Success as a coach is not solely judged on the quantity of wins you have but also on the quality of relationships you develop with your athletes" (Bennie & Connor, 2012)

Chapter 2 will discuss significant literature on motivation, influences, and coach-athlete relationships. There is a vast amount of research conducted on these topics as well the use of the Task and Ego Orientation Questionnaire. Upon the completion of chapter 2, you will gain a much better understanding of the literature this study is grounded in.

CHAPTER 2: LITERATURE REVIEW

The following section identifies current research that has been conducted on the motivational theories, influential figures, coach-athlete relationship, and the Task and Ego Orientation Questionnaire (TEOSQ) that affect an athlete's competitive drive. I have found that a multitude of motivational theories are a large part of the literature on collegiate athletes and their competitive drive. Because of this, I have chosen to weave theory into my literature review. Literature on these topics is endless and serves as a gateway for researchers in understanding the make-up of an athlete not only from an observable perspective but from an internal standpoint as well.

I spent the majority of eight weeks working on collecting valuable articles that encapsulated the topics of this study. In order to find valid information I used search terms that included but were not limited to; achievement motivation in sport, goal theory in sport, task and ego orientation in sport, TEOSQ, parental influences on athletes, athlete influences, coaching styles, motivation, and motivation in sport. The most common search engines that I used were EBSCO, Google Scholar and SportDiscus. I also utilized the James Madison University library website and selected the option to find articles in "all search engines" that were available.

The following conceptual framework design depicts the relationship between the topics that will be discussed in the literature review.

Conceptual Framework

I chose the following conceptual framework to show the equal correlation between the three main discussion topics in my literature review. Motivation, influential figures, and coach-athlete relationship all play an integral part in understanding where athletes find their competitive drive. Competitive drive is the outcome of these three discussion topics and is identified in the overlapping portion of the three relationship bubbles depicted below in Figure 1.

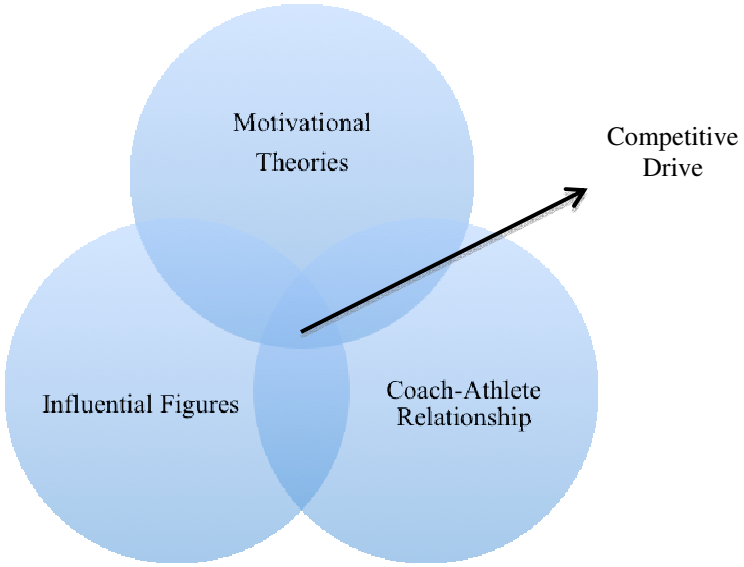


Figure 1: Conceptual Framework

Theoretical Framework

The literature on these topics reveals that theory is indeed a critical component to understanding the motivation of student-athletes. I have chosen to incorporate the most prominent theories that I found in the literature into the following literature review of motivation. In addition to my research on intrinsic versus extrinsic motivation, the literature uncovers that the social cognitive theory, self-efficacy, achievement motivation,

and goal theory are the most prominent theoretical implications in regard to the motivation of athletes.

Motivation

The most motivationally driven environments in our society today are in academics and sport competition (Ommundsen & Roberts, 1999; Reinboth & Duda, 2006). As stated by Schunk in 2012, "motivation is not observed directly, but rather inferred from behavioral indexes such as verbalizations, task choices, and goal-directed activities. Motivation is an explanatory concept that helps us understand why people behave the way they do" (p. 346). Motivation is divided into three common types; intrinsic motivation, extrinsic motivation, and amotivation. All athletes have a combination of intrinsic and extrinsic motivation but in some cases they become amotivated or for lack of better words exhibit a lack of motivation (Horn et al., 2011). It is important for researchers in this field to be able to differentiate between these three motivational states to better understand athletes' competitive drive.

Many theorists believe that motivation is a fulfillment of specific needs and urges that are based on goals, orientations, and internalizations that an athlete may have (Walczak & Tomczak, 2012; Halbrook et al., 2012; Cremades, Flournoy, & Gomez, 2012). Intrinsic motivation encompasses an athlete's natural human tendency to enjoy what they are doing and to learn without contingencies (Walczak & Tomczak, 2012; Halbrook et al., 2012; Cremades et al., 2012). Additionally, intrinsic motivation is based on inherent satisfactions that an athlete enjoys without feeling the pressure of a possible consequence (Cremades et al., 2012).

Typically, extrinsic motivation is based solely on external factors to avoid failure or punishment. Extrinsic motivation is also correlated with the expectation of material rewards such as scholarships and medals (Walczak & Tomczak, 2012; Halbrook et al., 2012; Cremades et al., 2012). Sadly some athletes can also become amotivated when they feel like they can not find a reason to compete anymore or when they feel like they have no control over their actions (Halbrook et al., 2012).

TEOSQ - Task and Ego Orientation Questionnaire

It is also important to note the differences between task and ego involvement in motivation. The TEOSQ was derived from an inventory originally created for academic achievement but can be transferred directly to sport achievement and participation. Task involvement looks at learning and competitiveness in sport as a type of goal where students focus on the demand of a task that is placed in front of them and performing to one's best ability (Castillo, Tomas, Balaguer, Fonseca, Dias, & Duda, 2010; Schunk, 2012). On the other hand ego involvement is synonymous with high achievement that is motivated by only extrinsic factors where students and athletes compare each other's abilities and compete against one another (Castillo et al., 2010; Duda, 1989; Schunk, 2012).

The Task and Ego Orientation in Sport Questionnaire (TEOSQ) is a modified version of an academic inventory designed by Nicholls (Duda, 1989; Nicholls, 1989) and his colleagues to study the task and ego orientation of athletes. The original idea for the TEOSQ was generated from an inventory given to students to assess their degree of task and ego orientation in the classroom (Duda, 1989; Nicholls 1989). Original results stated that students who thought that education lead to a higher standard of living were

correlated to higher scores in ego orientation and students who scored higher for task orientation saw school as a way to enhance their social commitment, understanding, and motivation for learning (Duda, 1989). With this information Nicholls was able to transform the scale used for academic orientations to sport orientations. Nicholls and colleagues found similar results between academic and sport scores. One should expect to see classroom behaviors bleed in to the sporting arena by the way students portray themselves; whether the athlete focuses on personal improvement (task orientation) or beating others (an ego orientation) while participating (Duda, 1989).

Boyd, Kim, Ensari, and Yin (2014) studied the perceived motivational team climate among male college athletes. In their study they defined task and ego orientation in a fashion that feeds from Nicholls previous definition. Task orientation reflects a dispositional approach to ability that includes skill development, mastery, and self-improvement behaviors. These said behaviors provide male collegiate athletes with perceptions of success while ego orientation is viewed as a conception of one's ability and is often measured as a subjective success. Subjective success is seen by their ability to outperform others (Boyd et al., 2014).

The TEOSQ allows researchers to identify what drives the competitiveness within their athletes. The differing goal orientations of athletes are presumed to be the psychological foundation for the competitive variability among athletes (Duda & Hom, 1993). Motivation, influences and the ability to be coached are three additional factors that help decipher the competitiveness among athletes.

As noted many times by Reinboth and Duda, (2006) athletes' well being is determined by the ability to satisfy their need for autonomy, competence, and familiarity

with the sport environment which they are a part of. Task oriented athlete's find the state of being competent more rewarding than ego oriented athletes. The motivational climate often promotes differential occurrences of task or ego states of involvement. Task-involved people have abilities that are self-referenced and feel a larger sense of competence after mastering a skill that they put forth large effort to (Reinboth & Duda, 2006).

Social Cognitive Theory and Self-Efficacy

In order to understand the following theories one must understand Bandura's social cognitive theory and the role that self-efficacy plays in an athlete's decisions and achievements (Schunk, 2012; Li & Lee, 2004). Bandura proposes observational learning as a key component to the performance of skills, strategies, and behaviors (Schunk, 2012). More importantly he extended his theory to encompass the ways people believe in themselves to control critical events and actions in their lives through self-efficacy (Li & Lee, 2004; Schunk, 2012). Schunk (2012) defines self-efficacy as, "A belief about what one is capable of doing; it is not the same as knowing what to do. In gauging self-efficacy, individuals assess their skills and their capabilities to translate those skills in to actions" (p. 146). Self-efficacy is prominent in current literature regarding competitive motives in both recreational and collegiate athletes (Li & Lee, 2004). The development of a person's enjoyment of an activity is seen through his or her competence or efficacy beliefs (Li & Lee, 2004; Schunk, 2012). Self-efficacy effects an athlete's conceptions of their abilities on motivational patterns and is often related directly to intrinsic motivation that was discussed in the previous section (Li & Lee, 2004).

Achievement Motivation and Goal Theory

As stated by Walczak and Tomczak (2012) and Li and Lee (2004) achievement motivation is a complex process and physical activity is a great opportunity to see this in athletes. Researchers also note that physical activity is often a good opportunity for athletes to develop behavior patterns based not only on their achievement motivation but also on their goal orientations (Walczak & Tomczak, 2012). Athletes' individual dispositions play in to their development of task or ego involvement in achievement contexts and influence their perception of the environmental cues, rewards, and expectations that encourage their involvement with sport (Ommundsen & Roberts, 1999). Traditionally achievement motivation is studied in a classroom setting but it has been correlated to sport participation and motivation in recent literature. According to Schunk (2012) and Li and Lee (2004) achievement motivation is a culmination of someone's persistence in being competent and motivated to satisfy their needs.

Students set conscious goals for themselves and these conscious goals dictate their motivational, behavioral, and affective responses (Li & Lee, 2004; Schunk, 2012). Often the goal theory includes behaviors and variables that are not directly related to goals but is more focused on one's influences on behavior such as their comparisons with others (Schunk, 2012). The goal theory emphasizes how different types of goal orientations influence behaviors in achievement situations; the two most prominent are task orientation and ego orientation (Li & Lee, 2004; Schunk, 2012). Environments that foster the mastery of learning and self-improvement fall in to task orientation and environments that focus on social comparisons and superior ability align with ego orientation (Castillo et al., 2010; Duda, 1989; Li & Lee, 2004; Schunk, 2012).

Influential Figures

There is a high association between the motivational climates of parents and coaches that young athletes generate (Palou, Ponseti, Cruz, Vidal, Cantallops, Borras, & Garcia-Mas, 2013). Beginning at birth, parents are a child's first influence. Many times parents play the largest role in a child's motivation in school as well as in sport. As children mature and become young adults, the motivational climate that their parents created continues through young adulthood. In general the second most influential person in a child and young adult's life is their sport coach. Coaches become a primary influence as young adult's increase in age (O'Rourke, Smith, Smoll, & Cumming, 2014). Reinboth and Duda (2006) discuss that the motivational attributes of the sport environment play a critical role in how an athlete is affected emotionally, physically, and psychologically; thus making the research on who influences athletes significant to this study. According to Walczak & Tomczak (2012) intrinsic motivation is hard to model but coaches, parents, and teachers can enhance one's intrinsic motivation by respecting one's independence, building autonomy, providing support, and by giving advice.

Parents have a significant role in molding their child's attitude and motivational behavior; parents not only provide guidance and influence in sport environments but also in social and academic environments (O'Rourke et al., 2014). Past research shows that the pressure from one's parents is an indicator of how well a child performs and perceives the situation at hand (Schunk, 2012). A study done by Duda and Hom (1993) compared the goal orientations of younger athletes and their parents. Duda and Hom noted that girls who shared that they had a greater amount of maternal involvement in their lives were more task oriented and boys showed no correlation (1993). This study

solidified that parents do indeed influence their child's goal orientation starting at a young age.

Coach-Athlete Relationship

"It is undisputed that coaches have an important role in the development of athletes in general. As coaches differ in their personality, competencies, qualifications, communication skills, motivational structure, leadership behaviours, etc.," they have differing motivational and influential effects on every athlete that they coach (Baric & Bucik, 2009, p. 181-182). According to the current literature it is safe to say that athletes react best to coaches with similar personality traits and motivational orientations to theirs (Baric & Bucik, 2009; Horn et al., 2011). When a coach plans a practice they commonly group, evaluate, recognize, and share authority with their athletes; in turn creating a climate that will impact their athletes' motivation (Reinboth & Duda, 2006).

The demanding role of a coach is extremely powerful and should be based on mutual respect, trust, and honesty (Norman and French, 2013; Bennie and Connor, 2012). The coach-athlete relationship begins with the coaches' ability to understand their athletes' learning and developmental capacities (Norman and French, 2013; Giabacci, Whitney, Roper & Butryn, 2002). Successful collegiate coaches also know that athletes' personalities impact team dynamics and effectiveness as well as understand that winning or losing an important competition can shape an athlete's perception of their coach's abilities and competence (Favor, 2011; Mata & Gomes, 2013). Coach Pat Summitt describes this perfectly:

> Bringing together disparate personalities to form a team is like a jigsaw puzzle…We want to make sure our players fit together properly and complement

> each other so that we don't have a big piece, a little piece, an oblong piece and a round piece. If personalities work against each other, as a team you'll find yourselves spinning your wheels (Summitt & Jenkins, 1998, p. 144).

Along similar lines, Favor (2011), states that because coaches' take responsibility for developing their athletes they must be willing to listen to coaching feedback, to learn from it, and to make changes when needed otherwise they will not find success. Often times an athlete's opinion comes secondary to coaching but in order to create a more coachable climate coaches must be willing to give their athletes a voice (Norman & French, 2013). According to recent research done by Norman and French, athletes, especially females, are more coachable when their coaches understood them as individuals, particularly looking and their personal motivations and goals (2013).

It has also been understood that coaches' motivational and psychological climates play a huge role in their athletes' success (Reinboth & Duda, 2006; Balaguer, Gonzalez,Fabra, Castillo, Merce, & Duda, 2012). Sports participation is inherently rewarding and is a contributor to an athlete's psychological well-being. These psychological environments vary by coaching style and impact athletes' motivational processes (Balaguer et al., 2012; Horn et al., 2011). Coaches that provide autonomy, support, and encouragement allow athletes to feel important and make their opinions valuable (Choi, Cho, & Huh, 2013; Balaguer et al., 2012). A respectable coach must be able to trust their athletes' opinions and be vulnerable to transferring authority or delegating tasks to their athletes and other coaching staff (Ladegard & Gjerde, p. 639).

In contrast to the previous approach, is the coach who has a controlling interpersonal style. Coaches that have a strict, authoritarian way of coaching often create

a coercive environment where their basic psychological and motivational needs are often not met; without autonomy, athletes feel pushed to behave in certain ways that may not be conducive to their needs (Belaguer, 2012).

In the following chapter I will discuss the methods of my study in detail. I will discuss the research design, population and sample, instrumentation, data collection and procedures, data analysis, limitations, and the protection of human subjects.

CHAPTER 3: METHODOLOGY

In this study I chose to focus on two distinct populations: collegiate level varsity student athletes as well as collegiate level club sport student athletes. The following chapter will clearly define the rationale, methodological procedures, and design that I used to collect and analyze data. The research questions that are being investigated in my study are:

RQ 1: Are there differences in task and ego orientations on the TEOSQ between club and varsity athletes at the collegiate level?

RQ 2: Are there differences in task and ego orientations on the TEOSQ between different sports teams?

RQ 3: Is there a higher task orientation among varsity athletes when compared to club athletes on the TEOSQ?

RQ 4: Is there a statistically significant difference between male and female athletes and their task and ego orientation on the TEOSQ?

RQ 5: Is there an overarching influence for both club and varsity athletes?

RQ 6: Are there statistically significant differences between males and females on the task orientation subscale of the TEOSQ?

RQ 7: Are there statistically significant differences between males and females on the ego orientation subscale of the TEOSQ?

RQ 8: Are there statistically significant differences between club and varsity athletes on the task orientation subscale of the TEOSQ?

RQ 9: Are there statistically significant differences between club and varsity athletes on the ego orientation subscale of the TEOSQ?

RQ 10: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the three club teams?

RQ 11: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the varsity teams?

In addition to the research questions stated above, the following two hypotheses will be tested:

H 1: Varsity collegiate athletes are more ego oriented than club sport athletes.

H 2: Male athletes on both varsity and club teams at the collegiate level have higher ego orientation.

Both independent and dependent variables are identified in the study. These variables are listed below in Table 2.

Table 2

Variables

Independent Variables	**Dependent Variables**
• Athlete gender • Sport level • Sport type • Age (all athletes were required to be 18yrs of age or older and assumed to be at most 23yrs of age)	• Personal Influences • Athlete's summated scores from the TEOSQ

Independent variables in this study include athlete gender, sport level, sport type,

and age. Dependent variables in this study are the athlete's influences as well as their summated scores from the TEOSQ. I will be able to measure the effects of the independent variables against the dependent variables in this study.

In order to collect data for this study, I chose to distribute paper surveys to both varsity and club student athletes that included the TEOSQ. Once the surveys were collected data were analyzed using the Qualtrics survey system as well as SPSS, Statistical Package for the Social Sciences. I was provided a login and password to the Qualtrics system via my graduate program, Adult Education and Human Resource Development, and was able to gain access to SPSS from the library at JMU via their Media Resources department. Once surveys were obtained I transferred all responses into the Qualtrics system so that the data were easily compiled and could be transferred to SPSS.

Research Design

As a certified athletic trainer, I have observed many different coaching styles. I have not only witnessed coaching at the Division I collegiate level but I have also been amongst coaches and athletes at the high school and community college level. After working for my third year at the Division I level, I have a strong interest in what motivates and drives both varsity and club student athletes to be competitive. I am interested in exploring who influences athletes and what motivates them to become competitors. It was not until my most recent job that I noticed the inconsistency between many coaches' understanding of their athlete's motivation. Many coaches also do not know how to adjust their coaching styles based on the task and ego orientations of their athletes. By understanding an athlete's competitive drive through their score on the

TEOSQ coaches can be better equipped to lead and coach their athletes. With this knowledge coaches will be able to design and implement strategies that will work best for the type of competitors that they have on their teams.

Research and Site Approvals

In the beginning of the Fall semester of 2014, I obtained all of the signatures on my Approval for Thesis or Dissertation Committee form and gained approval for the study "Competitive Drive in Varsity and Club Student Athletes at James Madison University: The Correlation Between Motivation, Influences, and Coach-Athlete Relationship". After diligently working on the Institutional Review Board (IRB) application throughout the semester I was given approval for writing my thesis on December 5, 2014.

As part of my IRB application I made sure to obtain signed site permission letters from, Thomas Kuster, Asst. AD for Sports Medicine as well as Eric Nickel, Director of University Recreation. This gave me permission to present and deliver surveys to the selected varsity and club teams at JMU.

Population and Sample

Participants in this study were chosen using purposive sampling. The sample was comprised of both male and female varsity and club student athletes at JMU that are 18 years of age or older. The varsity and club sport teams that were surveyed included men's and women's soccer, softball, baseball, men's and women's basketball, men's and women's tennis, and men's and women's golf. These specific teams were chosen because there were male and female teams at both the varsity and club level. These teams gave me a better chance for cross-referencing information across programs as well

as looking at individualistic sports like tennis and golf and more team based sports like soccer and basketball.

Although the student athlete population at JMU may not have the same composition as student athletes from other schools, I felt that JMU's high reputation in athletics would make the population for this questionnaire reliable. Based on the roster size of each team I was able to make the assumption that there would be between 30 and 200 athletes surveyed for this study. Once the survey window was closed I had collected a total of 129 completed surveys.

Instrumentation

A quantitative research design was used to better understand the motivational factors, influences, and coach-athlete relationship in both varsity and club athletes at JMU, as measured by the TEOSQ. As mentioned above, prior to creating the survey I calculated the approximate number of athletes on each team's roster. With the possibility of having upwards of 200 responses a quantitative survey was deemed the best option for obtaining information within the time constraints of my study. Both inferential and descriptive designs were used. The TEOSQ utilizes inventory scales identical to those described below and open-ended questions were not used. Upon completion of the survey, I pilot tested it with my advisor as well as approximately five peers.

One exception in the survey is that athletes were given the option to choose "Other" when answering a question about who influenced them. They were given a text entry box to write an influential figure that was not on the list. Only seven of the 129 respondents utilized the "Other" option, thus keeping the quantitative research design as the main form of data analysis.

Direct administration of paper surveys was deemed the best method for receiving a high response rate. Past researchers found that student-athletes give a higher response rate when surveys are presented to them in person. To ensure the anonymity of the survey there was an envelope provided at the practice location where I presented the surveys as well as a drop box in the Godwin Athletic Training Room Office 128 (Godwin 128C). Student athletes were encouraged to place their questionnaires in the drop box if they were uncomfortable leaving their surveys in the folder presented at their practice location. As questionnaires were collected they were placed in a locked file cabinet in the Godwin Athletic Training Room. The locked file cabinet sits between offices Godwin 128C and Godwin 128D. I will keep the keys until the study is completed and all data are properly destroyed via secure shredding.

The first section of the survey included demographic questions to help identify the characteristics of the purposed sample population. The chosen demographic questions in my survey will allow me to separate data into different groups for analysis purposes. With these specific demographic questions it will make cross tabulating between different demographic information much easier. Examples of demographic questions are shown below in Table 3.

Table 3

Demographic Questions

Demographic Questions
What is your gender? Male ___ Female ___

Transgender ___

Are you on a club team (UREC) or a varsity team (JMU Athletics)?

Club team (UREC) ___

Varsity team (JMU Athletics) ___

Who would you say is/are the person(s) that influenced your sport participation? (Choose all that apply)

Parent ___

Sibling ___

Cousin ___

Friend ___

Coach ___

Teacher ___

Individual drive ___

Other_____

Once athletes answered the first section of the survey they were presented with the TEOSQ. Although the TEOSQ was originally created to identify student competence in the classroom, it has more recently been used as a valid and reliable indicator for athletes' competitive drive. The TEOSQ provides participants with thirteen different statements in regard to their perceived success in sport participation. Each statement is answered using a common 5-point Likert scale (1 - strongly agree to 5 - strongly disagree). According to many studies that have used the TEOSQ to rate competitiveness it has been calculated that Cronbach's alpha coefficients are .82 and .89 respectively,

making the use of the TEOSQ very reliable (Duda, 1989). The TEOSQ can be seen below in Figure 2.

Task and Ego Orientation in Sport Questionnaire

Please select the answer that best indicates how you feel. There are no right or wrong answers.

I feel most successful in sport when:

	Strongly agree		Neutral		Strongly disagree
1. I learn a new skill and it makes me want to practice more.	1	2	3	4	5
2. I learn something that is fun to do.	1	2	3	4	5
3. I learn a new skill by trying hard.	1	2	3	4	5
4. I work really hard.	1	2	3	4	5
5. Something I learn makes me want to go and practice more.	1	2	3	4	5
6. A skill I learn really feels right.	1	2	3	4	5
7. I do my very best.	1	2	3	4	5
8. I'm the only one who can do the play or skill.	1	2	3	4	5
9. I can do better than my friends.	1	2	3	4	5
10. The others can't do as well as me.	1	2	3	4	5
11. Others mess up and I don't.	1	2	3	4	5
12. I score the most points/goals, etc.	1	2	3	4	5
13. I'm the best.	1	2	3	4	5

Figure 2: TEOSQ Inventory

By beginning the survey with demographic questions the researcher was able to better identify trends within athletes ego and task orientations related to the TEOSQ.

Data Collection and Procedures

Varsity and club coaches were informed of the survey via e-mail. They were asked for permission to administer it to their teams during treatment time in the athletic training room or during a designated practice time. Once permission was received the selected athletes were asked to complete a paper version of the survey that I presented to them during a designated time. Prior to administering the survey I presented the team with cover letters explaining the survey and its risks, confidentiality, and anonymity.

Athletes were also reminded that at any point they could refuse to take the survey at any point. All athletes had the choice of placing their survey in to a confidential folder during the meeting time or were given the option of turning in their survey to Godwin office 128 where a folder was marked for the surveys.

There were designated times planned for me to present my survey to the varsity and club sport teams. Student athletes were reminded that the survey is optional and that there are no consequences for not taking the survey. They were also informed of the little to no risk involved in completing the survey and no correlation to specific athletes were made. Names were not asked and all completed surveys were kept in a locked file cabinet between the offices of Godwin 128C and Godwin 128D on JMU's campus. I am the only person who holds a key to the locked file cabinet. Once my research is completed and my thesis is finalized I will properly destroy all surveys via our protected shredding system in the sports medicine department.

The research proposal done for this study was submitted to the institutional review board through my host institution, James Madison University, for approval. Cover letters will guarantee the anonymity and confidentiality of the research and will serve as protection for all human subjects in my study. Questionnaires were distributed via in person meetings with the teams and myself. Participants were reminded that they may forfeit the questionnaire at any time without any consequences.

The paper survey that I created was directly administered to student athletes between the weeks of November 17, 2014 to January 23, 2015. This five week period was chosen because of the multiple holiday breaks that occurred between the start and the end date of the study. I wanted ensure that I had the opportunity to survey as many of the

varsity and club student athletes as possible. Once the survey window closed there was a total of 129 completed surveys. Student athletes were not given incentives. It was apparent that some of their motivation to take the survey was drawn from their coach's interest in the study. They also may have been more interested in taking the survey once they were given the option to turn in the survey to a drop box at a private and secure location.

Data Analysis

Once the surveys were completed data were transferred to the Qualtrics survey system where descriptive statistics were calculated. Response charts and cross tabulations were viewed and downloaded from Qualtrics. Qualtrics allowed me to calculate frequencies, standard deviations, means, and variance for each survey question. Additional inferential statistical analyses were done using SPSS. SPSS allowed me to explore statistically significant differences between the independent and dependent variables in the survey. I compared male versus female responses as well as sport type and sport level. I also included the comparison of influences between male and female athletes and club versus varsity athletes.

Limitations

Previous research done by Duda,(1993) indicated that the TEOSQ provides very high reliability and validity when looking at athletes' perceived successes and abilities in sport participation. An article called *Relationship Between Task and Ego Orientation and the Perceived Purpose of Sport Among High School Athletes,* by Duda (1989), identified that the Cronbach's alpha coefficients, "that emerged from the factor analysis were .82 and .89, respectively," making the TEOSQ very reliable (p. 322). In addition to

the reliability of Chronbach's alpha, oblique and orthogonal rotations were conducted showing a valid, "stable factor structure" (Duda, 1989, p. 322).

In order to validate my study I created very specific demographic questions regarding the sample population; varsity and club level student athletes. The demographic questions that the survey began with highlight the specific topics noted in the research questions such as gender and sport comparisons. The combination of the demographic questions as well as the implementation of the TEOSQ provides an appropriate, meaningful, and useful data collection tool for my current study (Fraenkel, Wallen, & Hyun, 2012). By using the TEOSQ as part of the survey I was able to address the specific needs of my study that included determining whether the selected athletes are task or ego oriented. The TEOSQ is comprised of 13 statements that relate specifically to an athlete's personal competitive orientation, improving its validity for my study.

The reliability of the TEOSQ can been seen in the many other studies that have been done about athletes' task and ego orientations. Regardless of the amount of times and different locations in which the TEOSQ is given to an athlete, it is assumed that they will have relatively similar scores. Reliability focuses on the consistency of responses and when looking at Cronbach's alpha for the TEOSQ in the many studies done by Duda, we can see that the score of .82 and .89 are very high (1989).

The high response rate from the current survey will provide me with the ability to make better generalizations regarding the sample population. A high response rate gives me the ability to correlate responses from both varsity and club level sports as well as between many different sport types, influences, and gender. With a high response rate the generalizations made will be more accurate.

Although the aim of this study was to collect survey data from every athlete on over twenty varsity and club sport teams, threats must be considered. Past experience by other researchers stated that passing out paper surveys to athletes with the researcher present was the most successful way to gather data from the athlete population. With this said, there was still a considerable amount of athletes who did not complete the survey, especially from the club sport population.

Many of them chose to keep the survey and turn it in on their own. This decreased the likelihood of the survey being turned in. It is assumed that athletes forgot about the survey or did not want to take the time to fill it out and bring it to the designated turn in site.

Teams that were comprised of all females were much more willing to fill out the surveys and turn them in immediately. This may have skewed the results and made it more challenging to make a determination based on the researcher's second hypothesis that deduced that male athletes are more ego oriented than female athletes.

It is also important to note that initially the club athletic teams were more enthusiastic about responding to my survey. I assumed that the willingness of club athletes taking ownership of the survey would assist me in determining the validity of my first hypothesis that assumed that club sport athletes are more task oriented and self motivated. Unfortunately, club sport teams were much more difficult to plan meeting times with. They were great communicators but in the end I was only able to receive surveys from three of the club sport teams; men's basketball, women's basketball, and baseball.

Lastly, I believe that it is important to recognize the possibility of choosing the wrong population. As the researcher, I used my own judgment to select the sample population based on information I received from fellow researchers in the athletic field (Frankel et al., 2012).

Protection of Human Subjects

All proper precautions were taken when I decided to use human subjects to complete my survey. In addition to completing the IRB training module I decided to choose a mode of data collection that presented minimal risks for their participation. There were no risks beyond those that are taken in one's everyday life. In order to protect student athletes' confidentiality they were not asked for their names. It is assumed that the anonymity of the surveys was also protected because of the student athlete's option to place completed surveys in an unmarked folder during the designated survey time as well as being given the option to take them to a drop box at their convenience. Some people may argue that they anonymity of the surveys was not entirely protected because I was present during the time of distribution. It is important to note that the folder was placed in an area of the athletic training room or practice facility where the surveys were being taken so that I would not be able to follow who turned in which surveys. I have very little or no contact with the teams that I surveyed, nor personally knew any of the athletes. If a student athlete did not want to complete a survey they were not penalized. The following chapter moves on from methodology and identifies the specific findings from my survey as well as comparative statistics between responses.

CHAPTER 4: FINDINGS

In this chapter I will share the demographic characteristics, inferential statistics, and quantitative findings of my study. The beginning of this chapter will breakdown each survey question in to descriptive statistics and then move on to show more complex data analyses by utilizing t-test scores and other comparative computations.

The following research questions were tested in my study:

RQ 1: Are there differences in task and ego orientations on the TEOSQ between club and varsity athletes at the collegiate level?

RQ 2: Are there differences in task and ego orientations on the TEOSQ between different sports teams?

RQ 3: Is there a higher task orientation among varsity athletes when compared to club athletes on the TEOSQ?

RQ 4: Is there a statistically significant difference between male and female athletes and their task and ego orientation on the TEOSQ?

RQ 5: Is there an overarching influence for both club and varsity athletes?

RQ 6: Are there statistically significant differences between males and females on the task orientation subscale of the TEOSQ?

RQ 7: Are there statistically significant differences between males and females on the ego orientation subscale of the TEOSQ?

RQ 8: Are there statistically significant differences between club and varsity athletes on the task orientation subscale of the TEOSQ?

RQ 9: Are there statistically significant differences between club and varsity athletes on the ego orientation subscale of the TEOSQ?

RQ 10: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the three club teams?

RQ 11: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the varsity teams?

In addition to the research questions stated above, the following hypotheses were also tested:

H 1: Varsity collegiate athletes are more ego oriented than club sport athletes.

H 2: Overall male athletes on both varsity and club teams at the collegiate level have higher ego orientation.

Upon closure of my survey a total of 129 varsity and club student athletes at James Madison University (JMU) completed my survey. The survey was designed using quantitative questions. Using this survey helped me reach my goal of determining what drives the competitive nature of individual athletes and helped me to identify trends between demographics, sports teams, and level of play. A tool used to help me determine the goal orientation of these athletes was the Task and Ego Orientation Questionnaire (TEOSQ), a modified academic inventory created by Nicholls in 1989. The TEOSQ provided athletes with 13 statements relating to their goal orientations in sport that they were asked to rank on a 5 point Likert scale, 1=strongly agree to 5=strongly disagree.

By combining the demographic and quantitative finding of this survey I was able to better understand collegiate student-athlete competitive drive.

Demographic Findings

The first four questions of my survey served as demographic questions for my

study. By asking the following demographic questions I was able to categorize each respondent in to groups that allowed me to make knowledgeable assumptions regarding their competitive drive. I also utilized the Qualtrics survey system to generate tables for each question.

Q1. Gender

There was a 100% (n = 129) response rate to question number one. A total of 67 of the 129 (52%) respondents were male and a total of 62 of the 129 (48%) respondents were female. No respondents reported being transgender. The gender responses can be seen below in Table 4.1

Table 4.1

Gender

Answer		Response	%
Male		67	52%
Female		62	48%
Transgender		0	0%
Total		129	100%

Q2. Are you on a club team (UREC) or a varsity team (JMU Athletics) at JMU?

Question two also had a 100% (n=129) response rate. There were 40 (31%) respondents from the club teams at JMU and 89 (69%) of the respondents were on varsity teams at JMU. Below is Table 4.2 that shows the breakdown of club versus varsity responses to question number two.

Table 4.2

Club or varsity?

Answer		Response	%
Club team (UREC)		40	31%
Varsity team (JMU Athletics)		89	69%
Total		129	100%

Q3. What club sport do you spend most of your time participating in?

Question number three had a 100% (n=40) response rate for club student-athletes. There were 17 (43%) club baseball players, 11 (28%) men's club basketball players, and 12 (30%) women's club basketball players who responded. Other club sport teams were not available for surveying so the response rate is zero for the other teams. The responses for what club sport team student-athletes participate in are shown below in Table 4.3

Table 4.3

Club Sport

Answer		Response	%
Men's soccer		0	0%
Women's soccer		0	0%
Softball		0	0%
Baseball		17	43%
Men's basketball		11	28%
Women's basketball		12	30%
Men's tennis		0	0%
Women's tennis		0	0%
Men's golf		0	0%
Women's golf		0	0%
Total		40	100%

Q4. What varsity team are you on?

The last demographic question asked what varsity teams the varsity student-athlete respondents were on. There was a 100% (n=89) response rate. As seen in Table 4.4 below there were 4 (4%) men's soccer players, 11 (12%) women's soccer players, 20 (22%) softball players, 16 (18%) baseball players, 15 (17%) men's basketball players, 11 (12%) women's basketball players, 2 (2%) men's tennis players, 5 (6%) women's tennis players, 2 (2%) men's golfers, and 3 (3%) women's golfers who completed the survey.

Table 4.4

Varsity Team

Answer		Response	%
Men's soccer		4	4%
Women's soccer		11	12%
Softball		20	22%
Baseball		16	18%
Men's basketball		15	17%
Women's basketball		11	12%
Men's tennis		2	2%
Women's tennis		5	6%
Men's golf		2	2%
Women's golf		3	3%
Total		89	100%

It is important in my study to be able to divide respondents in to demographic groups. The following frequency table was designed to summarize the demographic information for easy referencing.

Table 4.5

Demographics Frequency Table

Demographic Question	**Frequency**	**Percent**
Choose one. Male__ Female__ Transgender__	 67 62 0	 58% 42% 0%
Are you on a club team (UREC) or a varsity team (JMU Athletics) at JMU? Club team (UREC) Varsity team (JMUAthletics)	 40 89	 31% 69%
What club sport do you spend the majority of your time participating in? Men's soccer Women's soccer Softball Baseball Men's basketball Women's basketball Men's tennis Women's tennis Men's golf Women's golf	 0 0 0 17 11 12 0 0 0 0	 0% 0% 0% 43% 28% 30% 0% 0% 0% 0%
What varsity team are you on? Men's soccer Women's soccer Softball Baseball Men's basketball Women's basketball Men's tennis Women's tennis Men's golf Women's golf	 4 11 20 16 15 11 2 5 2 3	 4% 12% 22% 18% 17% 12% 2% 6% 2% 3%

Descriptive Statistical Findings

By utilizing SPSS I ran descriptive comparison analysis between males and females as well as between club and varsity teams on the task and ego orientation subscales. The following histograms depict these comparisons.

Figures 3.1a and 3.1b are histograms that show that both male and female respondents from across both club and varsity sports scored high on the task orientation subscale. If a bell curve were placed over these histograms we would see that both were skewed to the right. Both males and females felt that they were strongly drawn to task orientation.

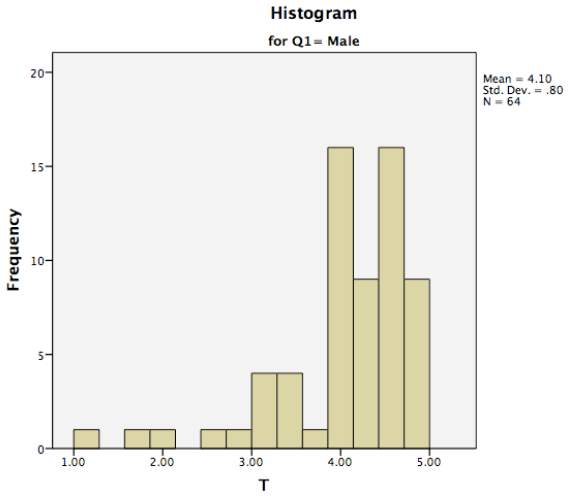


Figure 3.1a: Males vs Task subscale

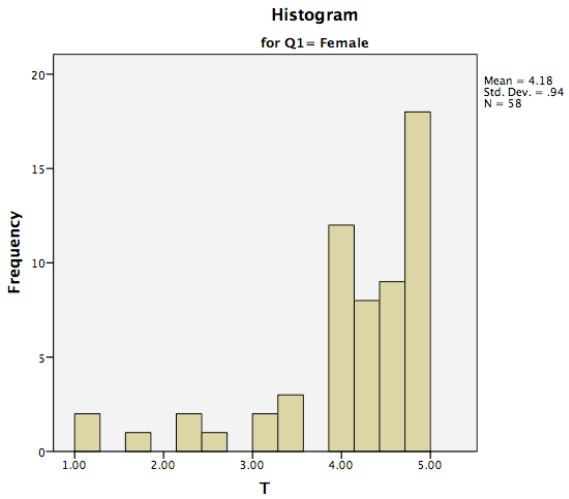
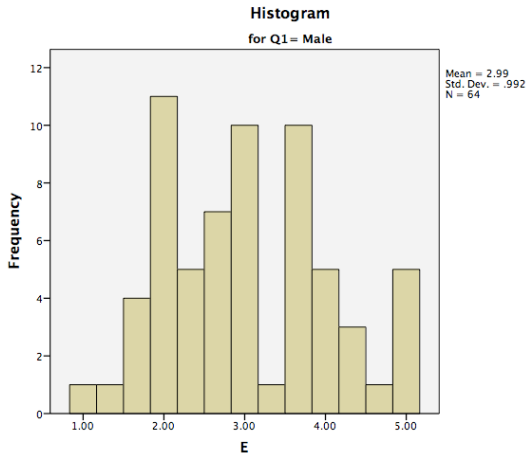


Figure 3.1b: Females vs Task subscale

The next descriptive statistics run on SPSS showed the ego orientation of both males and females across both club and varsity teams that responded. Figures 3.2a and 3.2b identify that males and females responded overall as neutral. A normal bell curve can be drawn over both ego orientation subscale histograms with the exception of a few

outliers in males in Figure 3.2a where some responded saying they disagreed with being ego oriented.



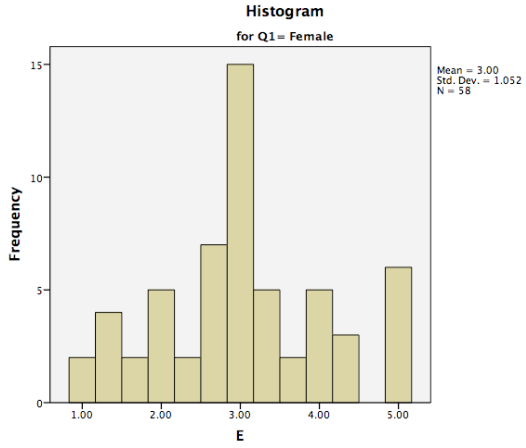


Figure 3.2a: Males vs Ego subscale

Figure 3.2b: Females vs Ego subscale

I also find it very important to show the comparisons made between club and varsity team responses in the histogram format. Figures 3.3a, 3.3b, 3.4a, and 3.4b will indicate the overall responses to the task and ego subscales on the TEOSQ among the club and varsity team respondents. In Figures 3.3a and 3.3b (shown below) the club teams had more responses toward being neutral than did those on the varsity teams on the task subscale. Varsity teams scored higher on the task subscale. A normal bell curve would be noted for the club team responses and a slightly skewed bell curve would be identified for the varsity responses.

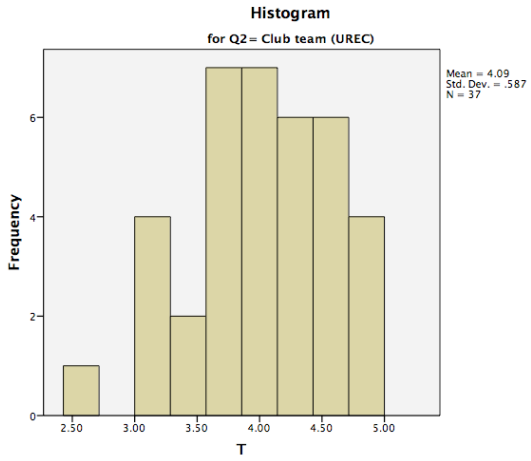


Figure 3.3a: Club vs Task subscale

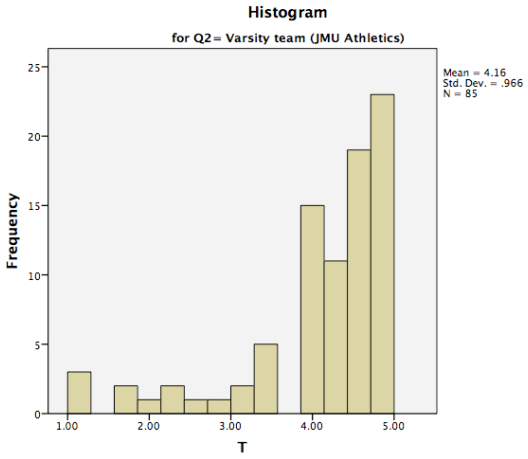


Figure 3.3b: Varsity vs Task subscale

Lastly, Figures 3.4a and 3.4b (shown below) correlate to the responses given by the club and varsity teams on the ego orientation subscale. According to Figure 3.4a club teams scored slightly lower on the ego subscale. More club athletes ranked themselves toward disagree than those on the varsity teams. Figure 3.4b shows that a majority of varsity athletes ranked themselves as neutral, a normal shaped bell curve would be seen here. A slightly skewed bell curve would be identified over the club team responses.

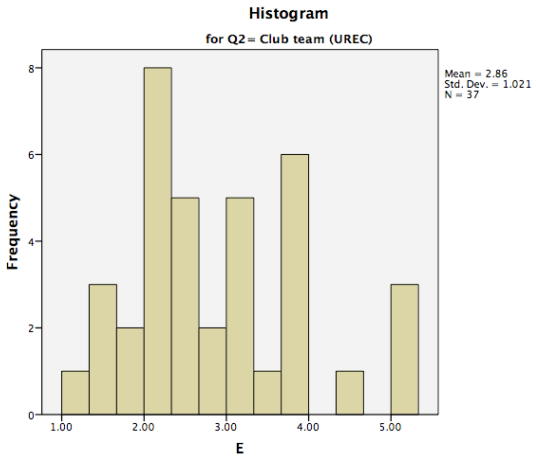


Figure 3.4a: Club vs Ego subscale

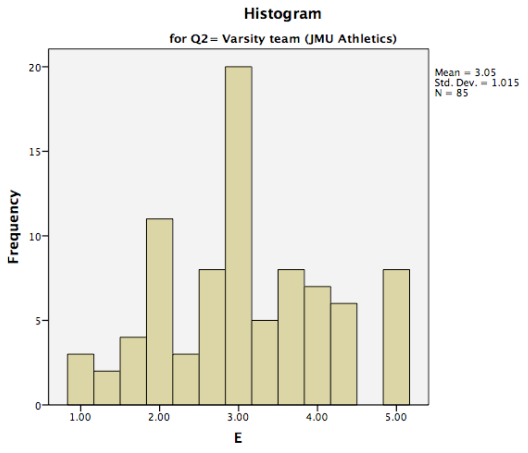


Figure 3.4b: Varsity vs Ego subscale

Questions 4 and 5 in my survey focus directly on who and what influences athletes to be competitive. I will begin by explaining the break down of responses and then further discuss responses in relation to the independent samples t-tests and the one-way ANOVAs that were run using SPSS (statistical package for social sciences.

Q5. Who would you say is/are the person(s) that influenced your sport participation?

Question number 5 focuses on who influences student athletes to participate in sport. There was a 100% (n=129) response rate and the majority of athletes said that their parents were their influence to participate in sport. This question gave student-athletes the opportunity to give multiple responses as well as the option to write in a person that influenced them that was not on the list. Out of the 129 respondents, 103 (80%) said parents, 33 (26%) said siblings, 3 (2%) said cousin, 44 (34%) said friend, 50 (39%) said coach, 7 (5%) said teacher, and 26 (20%) said individual drive was their influence. Lastly, 7 (5%) respondents utilized the "other" option. The responses can be seen in Table 4.5a and Table 4.5b below.

Table 5.1

Influences

Answer		Response	%
Parent		103	80%
Sibling		33	26%
Cousin		3	2%
Friend		44	34%
Coach		50	39%
Teacher		7	5%
Individual drive		26	20%
Other		7	5%

The other category included the responses grandfather, personal drive, television, and myself.

As seen above in Table 5.1, 50 or more student athletes at the club and varsity levels selected both parents and coaches. When separated by gender in Table 5.2 below, it is clear that siblings, cousins, and teachers were all similar in choice because of a one number difference between males and females. It is also noted that friends and individual drive had a larger difference between male and female student athletes. Based on gender males chose friends as an influence 27 times and females chose friends as an influence only 17 times. Subsequently individual drive was chosen by males only 10 times and chosen by females 16 times.

Table 5.2

Influences by gender

		Who would you say is/are the person(s) that influenced your sport participation? (Choose all that...								
		Parent	**Sibling**	**Cousin**	**Friend**	**Coach**	**Teacher**	**Individual drive**	**Other**	Total
What is your gender?	**Male**	47	17	2	27	24	4	10	5	67
	Female	56	16	1	17	26	3	16	2	62
	Transgender	0	0	0	0	0	0	0	0	0
	Total	103	33	3	44	50	7	26	7	129

Question number 5 on the survey was more complex. It provided the student-athlete with the TEOSQ. Responses to this questionnaire are broken down by each of the 13 statements that were ranked on a Likert scale, 1=strongly agree to 5=strongly disagree. As you can see in Table 5.3 below there was a 100% (n=129) response rate to all 13

statements except for statements 2, 4, 6, 8, and 12. Statements 2, 6, and 12 had 128 respondents and statements 4 and 8 had 127 responses.

Table 5.3

Task and Ego Orientation Questionnaire

I feel most successful when…

(1=strongly agree, 3=Neutral, 5=strongly disagree)

Statement	1	2	3	4	5	Total Responses
I learn a new skill and it makes me want to practice more.	57	41	22	6	3	129
I learn something that is fun to do.	59	40	18	4	7	128
I learn a new skill by trying hard.	57	44	17	7	4	129
I work really hard.	66	38	11	6	6	127
Something I learn makes me want to go and practice more.	54	42	24	6	3	129
A skill I learn really feels right.	56	45	18	7	2	128
I do my very best.	76	35	7	3	8	129
I'm the only one who can do the play or skill.	19	23	47	23	15	127
I can do better than my friends.	25	37	36	23	8	129
The others can't do as well as me.	14	28	41	33	13	129
Others mess up and I don't.	13	20	33	30	33	129
I score the most points/goals, etc.	21	21	39	23	24	128
I'm the best.	29	27	27	21	25	129

Entering and coding the survey responses in SPSS formulated the following samples t-test results.

Inferential Statistical Results

RQ 6: Are there statistically significant differences between males and females on the task orientation subscale of the TEOSQ?

Table 6.1 (as seen below) shows that there is no significant difference ($p = 0.60$) between male and female student athletes on the task orientation subscale of the TEOSQ. After inspecting both groups, data indicated that the means were almost the same for both males ($M = 4.11$) and females ($M = 4.20$). Cohen's d was computed as -.104 and effect size is generated at -.052, which is considered small.

Table 6.1

Task orientation subscale of TEOSQ: Males vs Females

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Task subscale			-0.50	123	0.60	-.104
Males	4.11	0.80				
Females	4.20	0.93				

RQ 7: Are there statistically significant differences between males and females on the ego orientation subscale of the TEOSQ?

Table 6.2 is shown below and shows that there is no significant difference ($p = 1.00$) between male and female student athletes on the ego subscale of the TEOSQ. Females ($M = 3.00$) and males ($M = 2.99$) scored means that were almost exactly the same. Both genders did not differ in their ego orientation on the TEOSQ. Cohen's d computed at 1.00 and the effect size generated is .005, which is considered a small effect size.

Table 6.2

Ego orientation subscale of TEOSQ: Males vs Females

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Ego subscale			0.02	124	1.00	1.00
Males	3.00	1.00				
Females	2.99	1.04				

RQ 8: Are there statistically significant differences between club and varsity athletes on the task orientation subscale of the TEOSQ?

The following Table 6.3 displays that there is not a significant difference ($p = 1.00$) between club and varsity athletes on the task orientation subscale of the TEOSQ. The mean for the club teams was $M = 4.11$ and the mean for varsity teams came out to $M = 4.17$, again very similar. When calculated, Cohen's d is -.075 and the effect size is -.038, and is also considered small.

Table 6.3

Task Orientation Subscale of the TEOSQ: Club vs Varsity

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Task subscale			-.345	123	.731	-.075
Club teams	4.11	1.00				
Varsity teams	4.17	1.04				

RQ 9: Are there statistically significant differences between club and varsity athletes on the ego orientation subscale of the TEOSQ?

Table 6.4 displays the results from the sample's t-test comparing club versus varsity teams against the ego orientation subscale on the TEOSQ. There were no significant differences ($p = .731$) between the club and varsity teams on the ego orientation subscale. The mean for club teams was $M = 2.85$ and the mean for varsity teams was calculated at

M = 3.06. Cohen's d was calculated at -.207 and the effect size was -.103, which is small.

Table 6.4

Ego Orientation Subscale of the TEOSQ: Club vs Varsity

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Ego subscale			-1.02	124	.312	-.207
Club teams	2.85	1.01				
Varsity teams	3.06	1.02				

In addition to the samples t-tests depicted above, I also ran two one-way analysis of variance tests (ANOVA) to analyze the following two questions.

RQ 10: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the three club teams?

Table 7.1a (as seem below) displays the means and standard deviations between club teams at both the task and ego subscales. Following Table 7.1a is Table 7.1b, Test of Homogeneity of Variances, which shows that the assumption of variances was not violated. According to the scores on the ANOVA, no significant differences were found among the three clubs teams and their task and ego orientations, $F(2,35) = 1.94$ and $p = .16$ for task subscale and $F(2,36) = 1.72$ and $p = .19$ for ego subscale as shown in table 7.2.

Table 7.1a

Means and Standard Deviations: Club Teams and Task vs Ego Orientation Subscales

Descriptives			
Variable	*n*	*M*	*SD*
Task subscale			
Baseball	16	4.18	0.58
Men's basketball	11	4.30	0.45

Women's basketball	11	3.83	0.70
Ego subscale			
Baseball	16	2.74	1.03
Men's basketball	11	3.32	1.15
Women's basketball	12	2.30	0.74

Table 7.1b

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Task	0.55	2	35	0.58
Ego	2.77	2	36	0.08

Table 7.2

One-Way Analysis of Variance Summary Table:

Club Teams and Task vs Ego Orientation Subscales

	ANOVA				
Variable	*df*	*SS*	*MS*	*F*	*p*
Task subscale					
Between groups	2	1.32	0.66	1.94	0.16
Within groups	35	11.90	0.34		
Total	37	13.23			
Ego subscale					
Between groups	2	3.37	1.69	1.72	0.19
Within groups	36	35.27	0.98		
Total	38	38.64			

RQ 11: Are there significant differences in the task and ego orientation subscales on the TEOSQ among varsity teams?

When looking at Tables 8.1a and 8.2 there are no obvious significant differences among the varsity teams based on the task and ego orientation subscales on the TEOSQ.

Opposing this statement is the Test of Homogeneity of Variances in Table 8.1b. The assumption of variances is violated in the task subscale (p = .04). Because of this violation I had to run a post hoc Games-Howell analysis to determine where the violation occurred in the data. The Games-Howell analysis was run and I found that the violation was between the baseball team and the women's golf team. The Games-Howell analysis revealed a p = .01 (Table 8.3) significance between baseball and women's golf. This was the only significant data comparison made in my study.

Table 8.1a

Means and Standard Deviations:

Varsity Teams and Task vs Ego Orientation Subscales

Descriptives

Variable	*n*	*M*	*SD*
Task subscale			
Men's soccer	4	4.43	0.52
Women's soccer	11	4.53	0.53
Softball	19	3.95	1.29
Baseball	15	3.78	1.02
Men's basketball	15	4.12	1.02
Women's basketball	11	4.51	0.42
Men's tennis	2	3.79	0.71
Women's tennis	5	4	1.02
Men's golf	2	4.71	0.2
Women's golf	3	5	0
Ego subscale			
Men's soccer	4	3.75	0.78
Women's soccer	10	3.53	0.94
Softball	20	3.01	1.22
Baseball	16	3.16	1.02
Men's basketball	15	2.69	0.86
Women's basketball	11	2.64	0.88
Men's tennis	2	2.67	0.71
Women's tennis	4	3.46	0.93
Men's golf	2	3.17	0.71

Women's golf	3	3.39	1.46

Table 8.1b

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Task	2.09	9	77	0.04
Ego	0.86	9	77	0.57

Table 8.2

One-Way Analysis of Variance Summary Table: Comparing Varsity Teams and Task and Ego Orientation Subscales

	ANOVA				
Variable	*df*	*SS*	*MS*	*F*	*p*
Task subscale					
Between groups	9	9.24	1.03	1.14	0.35
Within groups	77	69.45	0.90		
Total	86	78.69			
Ego subscale					
Between groups	9.68	9	1.08	1.05	0.41
Within groups	79.26	77	1.03		
Total	88.94	86			

Table 8.3

Post Hoc: Games-Howell Analysis with Independent Variable T

(I) Varsity Team	(J) Varsity Team	*p*
Baseball	Men's soccer	0.75
	Women's soccer	0.35
	Softball	1
	Men's basketball	0.99
	Women's basketball	0.33
	Men's tennis	1
	Women's tennis	1
	Men's golf	0.16

	Women's golf	0.01

(I) Varsity Team	(J) Varsity Team	*p*
Women's golf	Men's soccer	0.75
	Women's soccer	0.35
	Softball	1
	Baseball	0.01
	Men's basketball	0.99
	Women's basketball	0.33
	Men's tennis	1
	Women's tennis	1
	Men's golf	0.16

Following the analysis of the above questions a Chronbach's Alpha reliability was calculated based on the thirteen statements of the TEOSQ. The Chronbach's Alpha reliability was calculated at .862, making the use of the TEOSQ in this study very reliable. The next chapter will contain a discussion and conclusion that gives an overview of the data collection, procedures, and results of my study.

CHAPTER 5: DISCUSSION AND CONCLUSION

Chapter 5 will explore the findings, assumptions, and conclusions of my study. I will give a brief overview of what my study was looking to find as well as restate my research questions and hypotheses for reference. Additionally, recommendations for future research will be discussed prior to concluding my thesis.

The goal of my study was to determine what motivates an athlete to be competitive, who influences them, and to find out how significant the coach-athlete relationship is. After an extensive review of the literature, I created a survey that included demographic questions, influence questions, and the Task and Ego Orientation in Sport Questionnaire (TEOSQ). I determined that I could get a reliable sample population by using club and varsity athletes from James Madison University. Paper surveys were distributed to over 200 athletes and I graciously received 129 completed surveys, 40 from club athletes and 89 from varsity athletes.

The following research questions were tested in my study:

RQ 1: Are there differences in task and ego orientations on the TEOSQ between club and varsity athletes at the collegiate level?

RQ 2: Are there differences in task and ego orientations on the TEOSQ between different sports teams?

RQ 3: Is there a higher task orientation among varsity athletes when compared to club athletes on the TEOSQ?

RQ 4: Is there a statistically significant difference between male and female athletes and their task and ego orientation on the TEOSQ?

RQ 5: Is there an overarching influence for both club and varsity athletes?

RQ 6: Are there statistically significant differences between males and females on the task orientation subscale of the TEOSQ?

RQ 7: Are there statistically significant differences between males and females on the ego orientation subscale of the TEOSQ?

RQ 8: Are there statistically significant differences between club and varsity athletes on the task orientation subscale of the TEOSQ?

RQ 9: Are there statistically significant differences between club and varsity athletes on the ego orientation subscale of the TEOSQ?

RQ 10: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the three club teams?

RQ 11: Are there significant differences in the task and ego orientation subscales on the TEOSQ among the varsity teams?

In addition to the research questions stated above, the following hypotheses were also tested:

H 1: Varsity collegiate athletes are more ego oriented than club sport athletes.

H 2: Overall male athletes on both varsity and club teams at the collegiate level have higher ego orientation.

Key Findings and Implications

The results of this study indicated that there were no significant differences between any of my data analyses between varsity and club athletes and their responses on the TEOSQ, except for a small significance between the varsity baseball team and the varsity women's golf team. Both varsity and club as well as men's and women's teams scored quite evenly between task and ego orientation. It was my assumption that men at

the varsity level were going to score exponentially higher on the ego orientation subscale. Most of the time we see male athletes in rougher sporting contexts acting very self-centered and competitive. The results of my survey showed that not only are women just as competitive as men at the collegiate sport level but so are their club athlete counterparts. I assume that these results helped reveal that women have gotten increased support in collegiate athletics in the last ten years due to title IX and participation in sports at younger ages. In recent years girls are being introduced to sports at very young ages. Past decades and generations have been apprehensive about putting girls into sports at a young age because of the possibility of injury and fear of them losing their "femininity." With that said, I also made the assumption that men are more sensitive and intrinsically motivated than they tend to outwardly portray. I also learned that club sport athletes are not necessarily less ego oriented just because they play on a club team. It is possible that they join a club team because the university that they attend does not have a varsity athletic team that they are interested in being a member of. A great example of this is rugby. Although I did not survey the club rugby team, after having many conversations with some of the club rugby players they expressed the aggressiveness of rugby and that they would have been interested in being part of varsity athletics if they had the option of playing the sport at the varsity level.

The most influential people in the lives of all the student-athletes that I surveyed were their parents and coaches. Men scored slightly higher than women for having their friends as large influences in their sport participation as well. Another interesting finding was that there were significantly more varsity student-athletes that were available to take the survey than were club athletes. After reading the literature on the topic it makes

perfect sense that parents and coaches influence athletes the most. Many children are introduced to sports by their parents. Parents naturally are a child's first influence in sport participation. As they grow older and become collegiate level athletes their parents continue to be one of their biggest influences, especially if they were the people who first introduced them to a sport. Coaches also play a very large role in influencing athletes. Much of the literature talked about coaches being the second influence an athlete has. Coaches are introduced to athletes once they have made the decision to participate in a sport, thus making them the second most influential figure to their sport participation. Other influences that I would like to make note of are friends. Friends were the third highest selected influence on my survey and chosen more often by men. This result drew me to an assumption that men are potentially more often peer pressured to participate in sports.

Limitations

There are several limitations to my study. First, I would like to note that I might have had a better response rate and a wider variety of significant findings if I was able to survey club and varsity athletes at other universities. Another limitation is that I used only quantitative methods of obtaining information regarding the athlete's competitive drive. If I had a greater amount of time, I would have been interested in conducting interview sessions and offering short answer questions in my survey. I felt that I did not have ample time to do thorough interviews or code qualitative data to make meaningful inferences.

Lastly, I felt that it was somewhat of a challenge to get in contact with all of the club and varsity teams. We had many planned meeting times that were changed. Due to

the nature of athletics the teams' schedules changed often and I was not able to change my schedule to match theirs. I chose to distribute paper surveys because of past researchers' experiences with the low online response rates. At times I think I may have been able to reach more athletes if I utilized an online version of the survey so that we could avoid scheduling conflicts.

Recommendations for Future Study

Research regarding the competitive drive of collegiate athletes has posed to be a topic that includes many factors. My study only graced the surface of many of these subjects such as motivation, influences, and coach-athlete relationship. I would recommend that further research be done on coaching styles and leadership. It would be of great benefit for coaches to learn how to utilize the TEOSQ scores from each of their athletes to create a more holistic coaching environment.

Conclusion

As a result of my study I have found that parents and coaches tend to be an athlete's greatest source of influence on their competitive drive. Their motivation stems from many factors but mostly from a blend of intrinsic and extrinsic motives that influence their responses on the TEOSQ. Intrinsic motivation is a form of task orientation and extrinsic motivation carries much of an athletes' ego orientation. What interested me most in my research is that both club and varsity athletes in both female and male roles scored almost identical on the TEOSQ. Male and female athletes at both the club and varsity levels are equally ego and task oriented. Research on this subject is not done and I cannot wait to see what comes of these topics in the future. It will greatly impact college athletics.

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Appendices

Appendix A: IRB Application

James Madison University

Human Research Review Request

FOR IRB USE ONLY:			
Exempt:	**Protocol Number:**	**1st Review:** _____	**Reviewer:** _____
Expedited: **X**	**IRB:** 15-0272	**2nd Review:** _____	**Reviewer:** _____
Full Board:	**Received:** _____	**3rd Review:** _____	

Project Title:	Competitive drive in varsity and club student athletes at James Madison University: The correlation between achievement motivation and competence.
Project Dates: **(Not to exceed 1 year minus 1 day)**	From: 11/15/14 MM/DD/YY To: 8/31/15 MM/DD/YY
Minimum # of Participants:	30
Maximum # of Participants:	200
External Funding:	**Yes:** ☐ **No:** X **Internal Funding:** **Yes:** ☐ **No:** X
	If yes, Sponsor: _____
	Will monetary incentives be offered with funding? Yes: ☐ **No:** X
	If yes: How much per recipient? _____ **In what form?** _____
Must follow JMU Financial Policy:	http://www.jmu.edu/finprocedures/4000/4205.shtml#_Toc460225002
Responsible Researcher(s):	Carolann Baldridge
E-mail Address:	baldricr@dukes.jmu.edu
Telephone:	818-621-3746
Department:	Adult Education/Human Resource Development
Address (MSC):	6913
Please Select:	☐ Faculty ☐ Undergraduate Student ☐ Administrator/Staff Member X Graduate Student
(if Applicable):	
Research Advisor:	Noorjehan Brantmeier
E-mail Address:	brantmnk@jmu.edu
Telephone:	(540) 568-4530

Department: Adult Education/Human Resource Development
Address (MSC): 6913

Investigator: Please respond to the questions below. The IRB will utilize your responses to evaluate your protocol submission.

1. **X YES** ☐ **NO** Does the James Madison University Institutional Review Board define the project as ***research?***

   The James Madison University IRB defines "research" as a "*systematic* investigation designed to develop or contribute to *generalizable knowledge*." All research involving human participants conducted by James Madison University faculty and staff and students is subject to IRB review.

2. **X YES** ☐ **NO** Are the human participants in your study ***living*** individuals?

   "Individuals whose physiologic or behavioral characteristics and responses are the object of study in a research project. Under the federal regulations, human subjects are defined as: living individual(s) about whom an investigator conducting research obtains:
   (1) data through intervention or interaction with the individual; or (2) identifiable private information."

3. **X YES** ☐ **NO** Will you obtain data through ***intervention*** or ***interaction*** with these individuals?

   "Intervention" includes both physical procedures by which data are gathered (*e.g.*, measurement of heart rate or venipuncture) and manipulations of the participant or the participant's environment that are performed for research purposes. "Interaction" includes communication or interpersonal contact between the investigator and participant (*e.g.*, surveying or interviewing).

4. ☐ **YES X NO** Will you obtain ***identifiable private information*** about these individuals?

   "Private information" includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, or information provided for specific purposes which the individual can reasonably expect will not be made public (*e.g.*, a medical record or student record). "Identifiable" means that the identity of the participant may be ascertained by the investigator or associated with the information (*e.g.*, by name, code number, pattern of answers, etc.).

5. ☐ **YES X NO** Does the study present ***more than minimal risk*** to the participants?

   "Minimal risk" means that the risks of harm or discomfort anticipated in the proposed research are not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during performance of routine physical or psychological examinations or tests. Note that the concept of risk goes beyond physical risk and includes psychological, emotional, or behavioral risk as well as risks to employability, economic well being, social standing, and risks of civil and criminal liability.

CERTIFICATIONS:

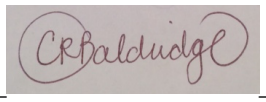
For James Madison University to obtain a Federal Wide Assurance (FWA) with the Office of Human Research Protection (OHRP), U.S. Department of Health & Human Services, **all** research staff working with human participants must sign this form and receive training in ethical guidelines and regulations. "Research staff" is defined as persons who have direct and substantive involvement in proposing, performing, reviewing, or reporting research and includes students fulfilling these roles as well as their faculty advisors. The Office of Research Integrity maintains a roster of all researchers who have completed training within the past three years.

Test module **at ORI website** http://www.jmu.edu/researchintegrity/irb/irbtraining.shtml

Name of Researcher(s)	Training Completion Date
Carolann Baldridge	**06/03/2014**
Dr. Noorjehan Brantmeier	**09/19/2013**

For additional training interests, or to access a Spanish version, visit the National Institutes of Health Protecting Human Research Participants (PHRP) Course at: http://phrp.nihtraining.com/users/login.php.

By signing below, the Responsible Researcher(s), and the Faculty Advisor (if applicable), certifies that he/she is familiar with the ethical guidelines and regulations regarding the protection of human research participants from research risks. In addition, he/she agrees to abide by all sponsor and university policies and procedures in conducting the research. He/she further certifies that he/she has completed training regarding human participant research ethics within the last three years.



___ _____ ____11/12/14 ____

Principal Investigator Signature Date

_____ _____

Principal Investigator Signature Date

_____ _____

Principal Investigator Signature Date

__ _____ _____11/12/14___

Faculty Advisor Signature Date

Submit an electronic version of your **ENTIRE** protocol to researchintegrity@jmu.edu.
Provide a **SIGNED** hard copy of the Research Review Request Form to:
Office of Research Integrity, MSC 5738, 601 University Boulevard, Blue Ridge Hall, Third Floor, Room # 344

Purpose and Objectives

What is the purpose of the study? Include any hypotheses or research questions. (Limit to one page)

The purpose of this study is to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. In order to understand and determine an athlete's competitive drive we must take in to consideration who and what influences them and what personality traits motivate their achievement in sport. Task versus ego orientation plays one of the largest roles in our understanding of an athlete's achievement motivation, competence, and competitive character. With this information coaches can greatly improve their leadership techniques. In addition to these factors, the following research will also identify correlations between an athlete's gender, specific sport and scores on the *Task and Ego Orientation in Sport Questionnaire* (TEOSQ). The research problem to investigate is how achievement motivation and competence are related to an athlete's gender, sport and influences. Additional research questions are: What are the differences in task and ego orientation in both club and varsity athletes at the collegiate level? How does knowing an athlete's task versus ego orientation help coaches lead their teams more effectively? and Do more athletes with higher task orientation play individualistic sports rather than team based sports? In addition to the research questions stated above, the following hypotheses will be tested: Collegiate athletes, both at the varsity and club levels, that participate in individualistic sports have a higher level of task orientation than

do athletes that participate in team based sports, and Male athletes, both on varsity and club teams at the collegiate level have higher ego orientation.

Procedures/Research Design/Methodology/Timeframe

Describe your participants. From where and how will potential participants be identified (e.g. class list, JMU bulk email request, etc.)?

Participants in this study will be a purposive sample. It will be comprised of both male and female varsity and club student-athletes at James Madison University. The selected athletes will be asked to complete a paper questionnaire that will be presented to them by the researcher at a designated time. Varsity coaches and club team leaders will approve a time either prior to or post practice for the researcher to provide questionnaires. If all student-athletes volunteer to participate in the questionnaire there will be approximately 200 respondents. Participants will be at least 18 years of age.

How will subjects be recruited once they are identified (e.g., mail, phone, classroom presentation)? Include copies of recruitment letters, flyers, or advertisements.

Once permission is received from varsity coaches and club team leaders, the researcher will present cover letters with the questionnaire attached. In addition to the instructions, a reminder will be given regarding the confidentiality and anonymity of the questionnaire. In person presentation of the questionnaire was deemed the best method for receiving a high response rate. Past researchers have found that student-athletes respond best to in person questionnaires rather than through links sent via e-mail. To ensure the anonymity of the survey there will be an envelope provided at the practice location as well as a drop box in the Godwin Athletic Training Room Office (Godwin 128C) for the student athletes to place their questionnaires once they are completed. As questionnaires are collected they will be placed in a locked file cabinet in the Godwin Athletic Training Room. The locked file cabinet sits between offices Godwin 128C and Godwin 128D. The researcher will keep the keys until the study is completed and all data is properly destroyed.

Describe the design and methodology, including all statistics, IN DETAIL. What exactly will be done to the subjects? (Emphasize possible risks and protection of subjects)

A quantitative research design will be used to better understand achievement motivation and competence in both varsity and club athletes at JMU, as measured by the TEOSQ. Both inferential and descriptive designs will be used. The TEOSQ used for this study will strictly contain inventory scales identical to those described below; open-ended questions will not be used.

Although the TEOSQ was originally created to identify student competence in the classroom, it has more recently been used as a valid and reliable indicator for athlete competence and achievement motivation. The questionnaire provides participants with thirteen different statements in regard to their perceived success in sport participation. Each statement is answered using a common 5-point Likert scale (1 - strongly agree to 5 - strongly disagree).

Previous research done by Joan L. Duda, has indicated that the TEOSQ provides very high reliability and validity when looking at athletes perceived successes and abilities in sport participation. An article called *Relationship Between Task and Ego Orientation and the Perceived Purpose of Sport Among High School Athletes,* by Duda (1989), identified that the Cronbach alpha coefficients, "that emerged from the factor analysis were .82 and .89, respectively," making the TEOSQ very reliable (p. 322). In addition to the reliability of Chronbach's alpha, oblique and orthogonal rotations were conducted showing a valid, "stable factor structure" (Duda, 1989, p. 322).

There will be designated times planned for the researcher to present the TEOSQ to the varsity and club sport teams. Student athletes will be reminded that the questionnaire is optional. There will be little to no risk involved in answering the questionnaire and no correlation to specific athletes will be made. Names will not be asked and all completed questionnaires will be kept in a locked file cabinet with access only to the researcher, Carolann Baldridge. The questionnaires will be properly destroyed once the research is complete.

The research proposal done for this study will be submitted to the institutional review board through the researcher's host institution, James Madison University, for approval. Cover letters will guarantee the anonymity and confidentiality of the research and will serve as protection for all human subjects in this study. Questionnaires will be distributed via in person meeting with the team and the researcher. Participants will be reminded that they may forfeit the questionnaire at any time without any consequences.

Will data be collected from any of the following populations?

_____ Minors (under 18 years of age); Specify Age: _____

_____ Prisoners
_____ Pregnant Women
_____ Fetuses
_____ Cognitively impaired persons
_____ Other protected or potentially vulnerable population
__X__ Not Applicable

Where will research be conducted? (Be specific; if research is being conducted off of JMU's campus a site letter of permission will be needed)

James Madison University – Sports Medicine/Athletics Department
James Madison University – University Recreation

Will deception be used? If yes, provide the rationale for the deception: N/A

What is the time frame of the study? (List the dates you plan on collecting data. This cannot be more than a year, and you cannot start conducting research until you get IRB approval)

The proposed time frame for the study is November, 2014 through August 31, 2015. Once IRB approval is received, a TEOSQ questionnaire will be distributed in person to participants between the dates of November 17, 2014 – January 23, 2014.

Data Analysis

What methodology will be taken to ensure the confidentiality of the data (i.e., how and where data will be stored/secured, how data will be analyzed, who will have access to data, and what will happen to data after the study is completed?)

TEOSQ questionnaires will be distributed in person via the researcher. Each questionnaire will be anonymous. There will be no correlation between the participant and the survey that they complete.

In order to identify the variables present in the given population, quantitative data will be collected. Descriptive and inferential statistics will then be generated. To better summarize the collected data, reports of the mean, mode, and standard deviation may be calculated. Correlational data such as gender and sport will be identified using t-Tests. The SPSS will also be a key instrument in collecting and analyzing the data collected from the TEOSQ.

Data will be kept in a locked file cabinet by the researcher. The researcher, Carolann Baldridge, will be the only person able to access the completed questionnaires. Once the study is complete all data will be properly destroyed.

Reporting Procedures

Who is the audience to be reached in the report of the study?

The audience to be reached in the report of the study will be the researcher's committee. The proposed committee members are:

Dr. Noorjehan Brantmeier – Committee Chair/Professor
Dr. Oris Griffin-McCoy – Committee member/Professor
Randell Snow – Committee member/Instructor

John Kaltenborn – Committee member/Certified Athletic Trainer

How will you present the results of the research? (If submitting as exempt, research cannot be published or publicly presented outside of the classroom)

The results of this study will be presented in a formal classroom setting to the committee members listed above. The researcher will "defend" the research topic and it's findings to her committee members.

How will feedback be provided to subjects?

If the participants are interested in the results of the study, have questions or concerns they can contact the researcher. The researcher will identify her contact information at the bottom of the informed consent forms as well as at the end of the questionnaire. She will be prepared to provide results or answers to any questions the participants may have.

Experience of the Researcher (and advisor, *if student)*:

What is the prior relevant experience of the researcher, advisor, and/or consultants?

Carolann Baldridge, the researcher, has a Bachelor of Science degree in Athletic Training from California State University, Long Beach. She is currently a graduate assistant athletic trainer in the Sports Medicine Department at James Madison University. In conjunction with her graduate assistantship she is a graduate student in the Adult Education/Human Resource Development department. She has completed graduate coursework in the following areas: research methods, design and development of digital media, performance analysis and needs assessment, instructional design, learning theories, program evaluation and foundations of human resources.

Dr. Noorjehan Brantmeier, the research advisor, received her Ph. D. in Adult Education and Human Resource Studies from Colorado State University. Her master's degree in social work was completed at Washington University in St. Louis. She has a strong background in conducting research and has a passion for studying social and economic development in Native American communities. She is currently a Graduate Faculty member at James Madison University and teaches research methods courses at the master's and doctoral levels. The following are the past and current research methods courses that she has taught: PSY 840: Qualitative and Mixed Research Methods, AHRD/EDUC 630: Research Methods & Inquiry, and AHRD 680/700: Reading & Research/ Thesis.

Cover Letter

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Carolann Baldridge from James Madison University. The purpose of this study is to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. This study will contribute to the researcher's completion of her master's thesis.

Research Procedures

This study consists of a questionnaire that will be administered to individual participants on selected varsity and club athletic teams at James Madison University. You will be asked to rate your perceived success in sport on a 13 statement Likert scale.

Time Required

Participation in this study will require no more than 10 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Potential benefits from participation in this study include the understanding what type of competitive athlete you are; whether you are ego or task oriented.

Confidentiality

The results of this research will be presented to a Research Review Committee comprised of three faculty members from the College of Education and one Certified Athletic Trainer from the Sports Medicine Department. While individual responses are obtained and recorded anonymously and kept in the strictest confidence, aggregate data will be presented representing averages or generalizations about the responses as a whole. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location accessible only to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Carolann Baldridge
Adult Ed./Human Resource Development
James Madison University
baldricr@dukes.jmu.edu

Noorjehan Brantmeier
Adult Ed./Human Resource Development
James Madison University
Telephone: (540) 568-4530
brantmnk@jmu.edu

Questions about Your Rights as a Research Subject

Dr. David Cockley
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu

Giving of Consent

I have read this cover letter and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. I certify that I am at least 18 years of age.

_____
Name of Researcher (Printed)

_____ _____
Name of Researcher (Signed) Date

Welcome to the Task and Ego Orientation in Sport Questionnaire (TEOSQ).

My name is Carolann Baldridge and I am a graduate student in the Adult Education and Human Resource Development program at JMU. In addition to my masters work I am a Graduate Assistant Athletic Trainer for the women's volleyball team. I am interested in looking at the achievement motivation and competence of varsity and club athletes at JMU by using the TEOSQ. I would greatly appreciate your help in my endeavor.

You are reminded that your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

1. Choose one.
   Male __
   Female __
   Transgender __

2. Are you on a club team (UREC) or a varsity team (JMU Athletics) at JMU?

   ___ Club team (UREC)
   ___ Varsity team (JMU Athletics)

3. What club sport do you spend most of your time participating in? (Choose one)

   (If you are on a varsity team skip to the next question)

   Men's soccer
   Women's soccer
   Softball
   Baseball
   Men's basketball
   Women's basketball
   Men's tennis
   Women's tennis
   Men's golf
   Women's golf

4. What varsity team are you on? (Choose one)

   Men's soccer
   Women's soccer
   Softball
   Baseball
   Men's basketball
   Women's basketball
   Men's tennis
   Women's tennis
   Men's golf
   Women's golf

5. Who would you say is/are the person(s) that influenced your sport participation? (Choose all that apply)

Parent
Sibling
Cousin
Friend
Coach
Teacher

Other_____

Task and Ego Orientation in Sport Questionnaire

Please select the answer that best indicates how you feel. There are no right or wrong answers.

I feel most successful in sport when:

	Strongly agree		Neutral		Strongly disagree
1. I learn a new skill and it makes me want to practice more.	1	2	3	4	5
2. I learn something that is fun to do.	1	2	3	4	5
3. I learn a new skill by trying hard.	1	2	3	4	5
4. I work really hard.	1	2	3	4	5
5. Something I learn makes me want to go and practice more.	1	2	3	4	5
6. A skill I learn really feels right.	1	2	3	4	5
7. I do my very best.	1	2	3	4	5
8. I'm the only one who can do the play or skill.	1	2	3	4	5
9. I can do better than my friends.	1	2	3	4	5
10. The others can't do as well as me.	1	2	3	4	5
11. Others mess up and I don't.	1	2	3	4	5
12. I score the most points/goals, etc.	1	2	3	4	5
13. I'm the best.	1	2	3	4	5

Thank you for participating in this questionnaire. If you have any questions or concerns regarding this study please contact the researcher, Carolann Baldridge, at baldricr@dukes.jmu.edu or the research advisor, Noorjehan Brantmeier, brantmnk@jmu.edu

Site Coordinator Letter of Permission

October 7, 2014

Institutional Review Board
James Madison University
MSC 5728
JMAC-6, Suite 26
Harrisonburg, VA 22807

Dear Institutional Review Board,

I hereby agree to allow Carolann Baldridge, from James Madison University to conduct her research through University Recreation (UREC) – Club Sports. I understand that the purpose of the study is to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. An inventory questionnaire based on ego versus task orientation, called the Task and Ego Orientation in Sport Questionnaire (TEOSQ), will be used as the data collection tool. All participants will be given the opportunity to anonymously participate in the inventory questionnaire.

By signing this letter of permission, I am agreeing to the following:

☒ JMU researcher(s) have permission to be on UREC's premises.

☒ JMU researcher(s) have unrestricted access to the data collected to perform the data analysis both for presentation to UREC and for publication purposes.

Sincerely,

Eric Nickel, Director of University Recreation
James Madison University, University Recreation

Site Coordinator Letter of Permission

October 7, 2014

Institutional Review Board
James Madison University
MSC 5728
JMAC-6, Suite 26
Harrisonburg, VA 22807

Dear Institutional Review Board,

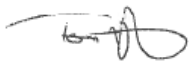
I hereby agree to allow Carolann Baldridge, from James Madison University to conduct her research through varsity sports at James Madison University. I understand that the purpose of the study is to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. An inventory questionnaire based on ego versus task orientation, called the Task and Ego Orientation in Sport Questionnaire (TEOSQ), will be used as the data collection tool. All participants will be given the opportunity to anonymously participate in the inventory questionnaire.

By signing this letter of permission, I am agreeing to the following:

☒ JMU researcher(s) have permission to be on James Madison University's athletics premises.

☒ JMU researcher(s) have unrestricted access to the data collected to perform the data analysis both for presentation to JMU Athletics and for publication purposes.

Sincerely,



Thomas Kuster, Assistant A.D. for Sports Medicine
James Madison University, Sports Medicine Department

Appendix B: IRB Approval E-mail

Dear Carolann,

I wanted to let you know that your IRB Protocol entitled, "***Competitive Drive in Varsity and Club Student Athletes at James Madison University: The Correlation between Achievement, Motivation, and Competence***" has been approved effective from 12/5/2014 through 8/31/2015. The signed action of the board form, approval memo, and close-out form will be sent to you via campus mail. Your protocol has been assigned No. 15-0272. Thank you again for working with us to get your protocol approved.

All research must be conducted in accordance with this approved submission, meaning that you will follow the research plan you have outlined in your protocol, use approved materials, and follow university policies.

Please take special note of the following important aspects of your approval:

- Any changes made to your study require approval ***before*** they can be implemented as part of your study. Contact the Office of Research Integrity at researchintegrity@jmu.edu with your questions and/or proposed modifications. An addendum request form can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbaddendum.doc.

- As a condition of the IRB approval, your protocol is subject to annual review. Therefore, you are required to complete a Close-Out form before your project end date. You *must* complete the close-out form unless you intend to continue the project for another year. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbcloseout.doc.

- If you wish to continue your study past the approved project end date, you must submit an Extension Request Form indicating a renewal, along with supporting information. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms /irbextensionrequest.doc.

- If there are in an adverse event and/or any unanticipated problems during your study, you must notify the Office of Research Integrity within 24 hours of the event or problem. You must also complete adverse event form, which can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms /irbadverseevent.doc.

Although the IRB office sends reminders, it is ultimately ***your responsibility*** to submit the continuing review report in a timely fashion to ensure there is no lapse in IRB approval.

Thank you again for working with us to get your protocol approved. If you have any questions, please do not hesitate to contact me.

Cindy Morgan
Administrative Assistant, Office of Research Integrity
James Madison University
Blue Ridge Hall, Room # 342, MSC 5738
Harrisonburg, VA 22807
Phone: (540) 568-7025
FAX: (540) 568-6409
Email: morgancs@jmu.edu
Office Email: researchintegrity@jmu.edu

Appendix C: Cover Letter and Consent Form

Cover Letter

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Carolann Baldridge from James Madison University. The purpose of this study is to examine the numerous factors that drive varsity and club level collegiate athletes to be competitive. This study will contribute to the researcher's completion of her master's thesis.

Research Procedures

This study consists of a questionnaire that will be administered to individual participants on selected varsity and club athletic teams at James Madison University. You will be asked to rate your perceived success in sport on a 13 statement Likert scale.

Time Required

Participation in this study will require no more than 10 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Potential benefits from participation in this study include the understanding what type of competitive athlete you are; whether you are ego or task oriented.

Confidentiality

The results of this research will be presented to a Research Review Committee comprised of three faculty members from the College of Education and one Certified Athletic Trainer from the Sports Medicine Department. While individual responses are obtained and recorded anonymously and kept in the strictest confidence, aggregate data will be presented representing averages or generalizations about the responses as a whole. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location accessible only to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of

any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Carolann Baldridge
Adult Ed./Human Resource Development
James Madison University
baldricr@dukes.jmu.edu

Noorjehan Brantmeier
Adult Ed./Human Resource Development
James Madison University
Telephone: (540) 568-4530
brantmnk@jmu.edu

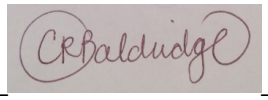
Questions about Your Rights as a Research Subject

Dr. David Cockley
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu

Giving of Consent

I have read this cover letter and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. I certify that I am at least 18 years of age.

___Carolann Baldridge_____
Name of Researcher (Printed)



____ _____ _____dates varied___
Name of Researcher (Signed) Date

Appendix D: Survey Questionnaire

Welcome to the Task and Ego Orientation in Sport Questionnaire (TEOSQ).

My name is Carolann Baldridge and I am a graduate student in the Adult Education and Human Resource Development program at JMU. In addition to my masters work I am a Graduate Assistant Athletic Trainer for the women's volleyball team. I am interested in looking at the achievement motivation and competence of varsity and club athletes at JMU by using the TEOSQ. I would greatly appreciate your help in my endeavor.

You are reminded that your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

1. Choose one.
   Male __
   Female __
   Transgender __

2. Are you on a club team (UREC) or a varsity team (JMU Athletics) at JMU?

   ___ Club team (UREC)
   ___ Varsity team (JMU Athletics)

3. What club sport do you spend most of your time participating in? (Choose one)

   (If you are on a varsity team skip to the next question)

   Men's soccer
   Women's soccer
   Softball
   Baseball
   Men's basketball
   Women's basketball
   Men's tennis
   Women's tennis
   Men's golf
   Women's golf

4. What varsity team are you on? (Choose one)

   Men's soccer
   Women's soccer
   Softball
   Baseball
   Men's basketball
   Women's basketball
   Men's tennis
   Women's tennis
   Men's golf
   Women's golf

5. Who would you say is/are the person(s) that influenced your sport participation? (Choose all that apply)

Parent
Sibling
Cousin
Friend
Coach
Teacher

Other_____

Task and Ego Orientation in Sport Questionnaire

Please select the answer that best indicates how you feel. There are no right or wrong answers.

I feel most successful in sport when:

	Strongly agree		Neutral		Strongly disagree
1. I learn a new skill and it makes me want to practice more.	1	2	3	4	5
2. I learn something that is fun to do.	1	2	3	4	5
3. I learn a new skill by trying hard.	1	2	3	4	5
4. I work really hard.	1	2	3	4	5
5. Something I learn makes me want to go and practice more.	1	2	3	4	5
6. A skill I learn really feels right.	1	2	3	4	5
7. I do my very best.	1	2	3	4	5
8. I'm the only one who can do the play or skill.	1	2	3	4	5
9. I can do better than my friends.	1	2	3	4	5
10. The others can't do as well as me.	1	2	3	4	5
11. Others mess up and I don't.	1	2	3	4	5
12. I score the most points/goals, etc.	1	2	3	4	5
13. I'm the best.	1	2	3	4	5

Thank you for participating in this questionnaire. If you have any questions or concerns regarding this study please contact the researcher, Carolann Baldridge, at baldricr@dukes.jmu.edu or the research advisor, Noorjehan Brantmeier, brantmnk@jmu.edu

Appendix E: Table 1 Key Terms and Definitions

Table 1

Key Terms and Definitions

Keyword	Definition
Task orientation	"A task orientation reflects a dispositional approach to use undifferentiated criteria of ability, such as skill development, mastery and self-improvement, which provide perceptions of success" (Boyd, Kim, Ensari, & Yin, 2014, p. 315)
Ego orientation	"An ego orientation entails a differentiated conception of ability where subjective success is based upon one's capacity to outperform others or demonstrate superior ability" (Boyd, Kim, Ensari, & Yin, 2014, p. 315).
Achievement motivation	Ones ability to strive for competence in activities which require them to put forth effort and desire to satisfy one's needs (Schunk, 2012).
Goal theory	Includes a wide array of variables and relationships between goals, expectations, motivations, and abilities (Schunk, 2012, p. 374-375).
Motivation	"Motivation is not observed directly, but rather inferred from behavioral indexes such as verbalizations, task choices, and goal-directed activities. Motivation is an explanatory concept that helps us understand why people behave the way they do" (Schunk, 2012, p. 346).
Intrinsic motivation	Type of motivation that stems from one's internal desires to engage in activities with no reward (Walczak & Tomczak, 2012; Schunk, 2012).
Extrinsic motivation	Type of motivation where an activity is based solely on external factors such as material rewards (Walczak & Tomczak, 2012).
Amotivation	"The term refers to a relative lack of motivation (either intrinsic or extrinsic) and is thus considered to be at the extreme end

	of the non-self determined continuum" (Horn, Bloom, Berglund & Packard, 2011, p. 193)
Coach-athlete relationship	"Success as a coach is not solely judged on the quantity of wins you have but also on the quality of relationships you develop with your athletes" (Bennie & Connor, 2012)

Appendix F: Table 2 Variables

Table 2

Variables

Independent Variables	**Dependent Variables**
• Athlete gender • Sport level • Sport type • Age (all athletes were required to be 18yrs of age or older and assumed to be at most 23yrs of age)	• Personal Influences • Athlete's summated scores from the TEOSQ

Appendix G: Table 3 Demographic Questions

Table 3

Demographic Questions

Demographic Questions
What is your gender? Male ___ Female ___ Transgender ___ Are you on a club team (UREC) or a varsity team (JMU Athletics)? Club team (UREC) ___ Varsity team (JMU Athletics) ___ Who would you say is/are the person(s) that influenced your sport participation? (Choose all that apply) Parent ___ Sibling ___ Cousin ___ Friend ___ Coach ___ Teacher ___ Individual drive ___ Other_____

Appendix H: Tables 4.1 – 4.4

Table 4.1

Gender

Answer		Response	%
Male		67	52%
Female		62	48%
Transgender		0	0%
Total		129	100%

Table 4.2

Club or Varsity

Answer		Response	%
Club team (UREC)		40	31%
Varsity team (JMU Athletics)		89	69%
Total		129	100%

Table 4.3

Club Sport

Answer		Response	%
Men's soccer		0	0%
Women's soccer		0	0%
Softball		0	0%
Baseball		17	43%
Men's basketball		11	28%
Women's basketball		12	30%
Men's tennis		0	0%
Women's tennis		0	0%
Men's golf		0	0%
Women's golf		0	0%
Total		40	100%

Table 4.4

Varsity Team

Answer		Response	%
Men's soccer		4	4%
Women's soccer		11	12%
Softball		20	22%
Baseball		16	18%
Men's basketball		15	17%
Women's basketball		11	12%
Men's tennis		2	2%
Women's tennis		5	6%
Men's golf		2	2%
Women's golf		3	3%
Total		89	100%

Appendix I: Table 4.5 Demographics Frequency Table

Table 4.5

Demographics Frequency Table

Demographic Question	**Frequency**	**Percent**
Choose one. Male__ Female__ Transgender__	 67 62 0	 58% 42% 0%
Are you on a club team (UREC) or a varsity team (JMU Athletics) at JMU? Club team (UREC) Varsity team (JMUAthletics)	 40 89	 31% 69%
What club sport do you spend the majority of your time participating in? Men's soccer Women's soccer Softball Baseball Men's basketball	 0 0 0 17 11	 0% 0% 0% 43% 28%

Women's basketball	12	30%
Men's tennis	0	0%
Women's tennis	0	0%
Men's golf	0	0%
Women's golf	0	0%
What varsity team are you on?		
Men's soccer	4	4%
Women's soccer	11	12%
Softball	20	22%
Baseball	16	18%
Men's basketball	15	17%
Women's basketball	11	12%
Men's tennis	2	2%
Women's tennis	5	6%
Men's golf	2	2%
Women's golf	3	3%

Appendix J: Tables 5.1-5.2

Table 5.1 Influences

Influences

Answer		Response	%
Parent		103	80%
Sibling		33	26%
Cousin		3	2%
Friend		44	34%
Coach		50	39%
Teacher		7	5%
Individual drive		26	20%
Other		7	5%

Table 5.2 Influences by Gender

Influences by gender

		Who would you say is/are the person(s) that influenced your sport participation? (Choose all that...								
		Parent	**Sibling**	**Cousin**	**Friend**	**Coach**	**Teacher**	**Individual drive**	**Other**	Total
	Male	47	17	2	27	24	4	10	5	67

What is your gender?	**Female**	56	16	1	17	26	3	16	2	62
	Transgender	0	0	0	0	0	0	0	0	0
	Total	103	33	3	44	50	7	26	7	129

Appendix K: Tables 5.3 Task and Ego Orientation Questionnaire

Table 5.3

Task and Ego Orientation in Sport Questionnaire

I feel most successful when...

(1=strongly agree, 3=neutral, 5=strongly disagree)

Statement	1	2	3	4	5	Total Responses
I learn a new skill and it makes me want to practice more.	57	41	22	6	3	129
I learn something that is fun to do.	59	40	18	4	7	128
I learn a new skill by trying hard.	57	44	17	7	4	129
I work really hard.	66	38	11	6	6	127
Something I learn makes me want to go and practice more.	54	42	24	6	3	129
A skill I learn really feels right.	56	45	18	7	2	128
I do my very best.	76	35	7	3	8	129
I'm the only one who can do the play or skill.	19	23	47	23	15	127
I can do better than my friends.	25	37	36	23	8	129
The others can't do as well as me.	14	28	41	33	13	129
Others mess up and I don't.	13	20	33	30	33	129
I score the most points/goals, etc.	21	21	39	23	24	128
I'm the best.	29	27	27	21	25	129

Appendix L: Tables 6.1-6.4

Table 6.1

Task orientation subscale of TEOSQ: Males vs Females

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Task subscale			-0.50	123	0.60	-.104
Males	4.11	0.80				
Females	4.20	0.93				

Table 6.2

Ego orientation subscale of TEOSQ: Males vs Females

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Ego subscale			0.02	124	1.00	1.00
Males	3.00	1.00				
Females	2.99	1.04				

Table 6.3

Task Orientation Subscale of the TEOSQ: Club vs Varsity

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Task subscale			-.345	123	.731	-.075
Club teams	4.11	1.00				
Varsity teams	4.17	1.04				

Table 6.4

Ego Orientation Subscale of the TEOSQ: Club vs Varsity

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Ego subscale			-1.02	124	.312	-.207
Club teams	2.85	1.01				
Varsity teams	3.06	1.02				

Appendix M: Tables 7.1a-7.2

Means and Standard Deviations: Club Teams and Task vs Ego Orientation Subscales

Descriptives

Variable	*n*	*M*	*SD*
Task subscale			
Baseball	16	4.18	0.58
Men's basketball	11	4.30	0.45

Women's basketball	11	3.83	0.70
Ego subscale			
Baseball	16	2.74	1.03
Men's basketball	11	3.32	1.15
Women's basketball	12	2.30	0.74

Table 7.1b

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Task	0.55	2	35	0.58
Ego	2.77	2	36	0.08

Table 7.2

One-Way Analysis of Variance Summary Table:

Club Teams and Task vs Ego Orientation Subscales

	ANOVA				
Variable	*df*	*SS*	*MS*	*F*	*p*
Task subscale					
Between groups	2	1.32	0.66	1.94	0.16
Within groups	35	11.90	0.34		
Total	37	13.23			
Ego subscale					
Between groups	2	3.37	1.69	1.72	0.19
Within groups	36	35.27	0.98		
Total	38	38.64			

Appendix N: Tables 8.1a-8.3

Table 8.1a

Means and Standard Deviations:

Varsity Teams and Task vs Ego Orientation Subscales

Descriptives

Variable	*n*	*M*	*SD*
Task subscale			
Men's soccer	4	4.43	0.52
Women's soccer	11	4.53	0.53
Softball	19	3.95	1.29
Baseball	15	3.78	1.02
Men's basketball	15	4.12	1.02
Women's basketball	11	4.51	0.42
Men's tennis	2	3.79	0.71
Women's tennis	5	4	1.02
Men's golf	2	4.71	0.2
Women's golf	3	5	0
Ego subscale			
Men's soccer	4	3.75	0.78
Women's soccer	10	3.53	0.94
Softball	20	3.01	1.22
Baseball	16	3.16	1.02
Men's basketball	15	2.69	0.86
Women's basketball	11	2.64	0.88
Men's tennis	2	2.67	0.71
Women's tennis	4	3.46	0.93
Men's golf	2	3.17	0.71
Women's golf	3	3.39	1.46

Table 8.1b

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Task	2.09	9	77	0.04
Ego	0.86	9	77	0.57

Table 8.2

One-Way Analysis of Variance Summary Table:
Comparing Varsity Teams and Task and Ego Orientation Subscales

ANOVA

Variable	*df*	*SS*	*MS*	*F*	*p*

Task subscale					
Between groups	9	9.24	1.03	1.14	0.35
Within groups	77	69.45	0.90		
Total	86	78.69			
Ego subscale					
Between groups	9.68	9	1.08	1.05	0.41
Within groups	79.26	77	1.03		
Total	88.94	86			

Table 8.3

Post Hoc: Games-Howell Analysis with Independent Variable T

(I) Varsity Team	(J) Varsity Team	*p*
Baseball	Men's soccer	0.75
	Women's soccer	0.35
	Softball	1
	Men's basketball	0.99
	Women's basketball	0.33
	Men's tennis	1
	Women's tennis	1
	Men's golf	0.16
	Women's golf	0.01

(I) Varsity Team	(J) Varsity Team	*p*
Women's golf	Men's soccer	0.75
	Women's soccer	0.35
	Softball	1
	Baseball	0.01
	Men's basketball	0.99
	Women's basketball	0.33
	Men's tennis	1
	Women's tennis	1
	Men's golf	0.16

Appendix O: Figure 1 Conceptual Framework

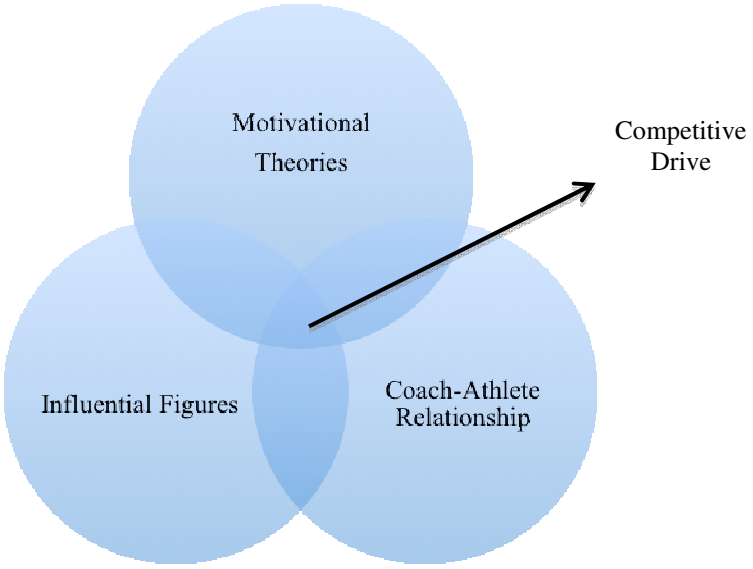


Figure 1: Conceptual Framework

Appendix P: Figure 2 TEOSQ Inventory

Task and Ego Orientation in Sport Questionnaire

Please select the answer that best indicates how you feel. There are no right or wrong answers.

I feel most successful in sport when:

	Strongly agree		Neutral		Strongly disagree
1. I learn a new skill and it makes me want to practice more.	1	2	3	4	5
2. I learn something that is fun to do.	1	2	3	4	5
3. I learn a new skill by trying hard.	1	2	3	4	5
4. I work really hard.	1	2	3	4	5
5. Something I learn makes me want to go and practice more.	1	2	3	4	5
6. A skill I learn really feels right.	1	2	3	4	5
7. I do my very best.	1	2	3	4	5
8. I'm the only one who can do the play or skill.	1	2	3	4	5
9. I can do better than my friends.	1	2	3	4	5
10. The others can't do as well as me.	1	2	3	4	5
11. Others mess up and I don't.	1	2	3	4	5
12. I score the most points/goals, etc.	1	2	3	4	5
13. I'm the best.	1	2	3	4	5

Figure 2: TEOSQ Inventory

Appendix Q: Figures 3.1a and 3.1b

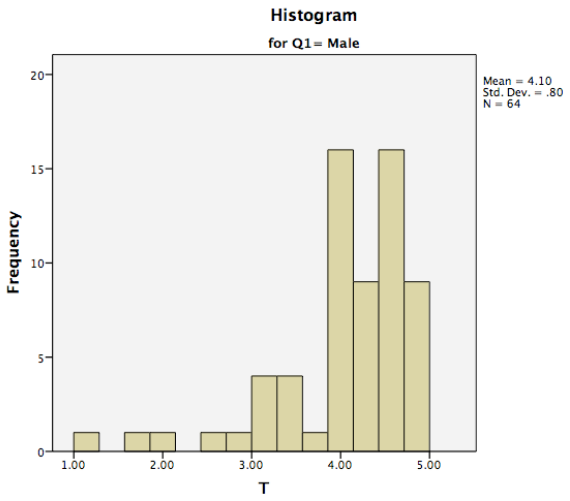


Figure 3.1a: Males vs Task subscale

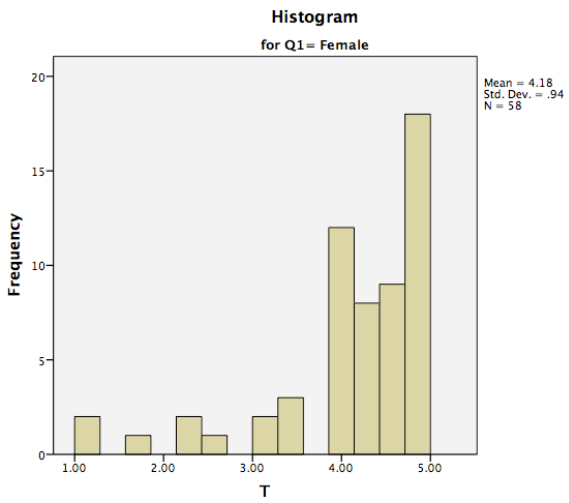


Figure 3.1b: Females vs Task subscale

Appendix R: Figures 3.2a and 3.2b

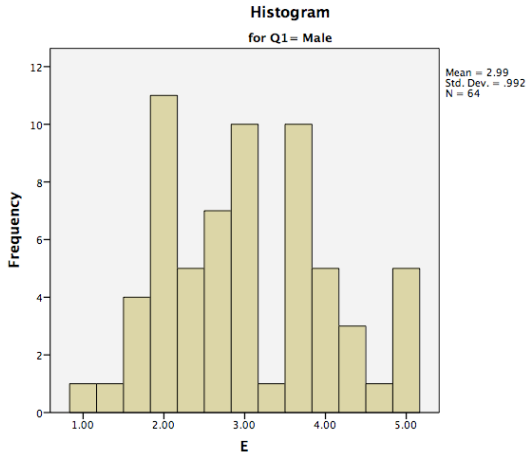


Figure 3.2a: Males vs Ego subscale

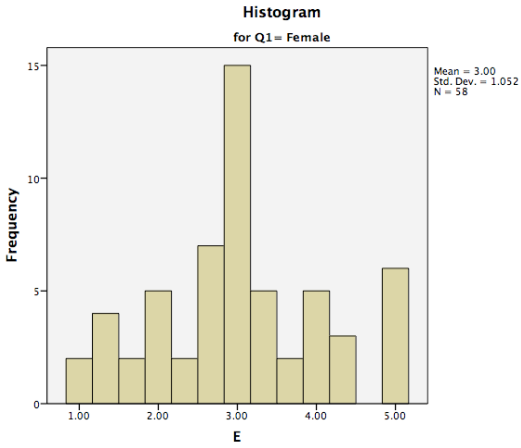


Figure 3.2b: Females vs Ego subscale

Appendix S: Figures 3.3a and 3.3b

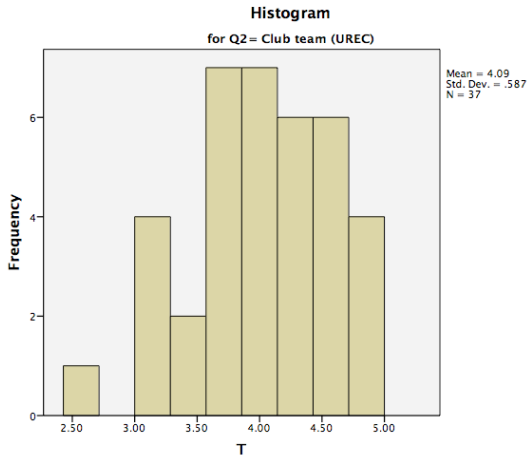


Figure 3.3a: Club vs Task subscale

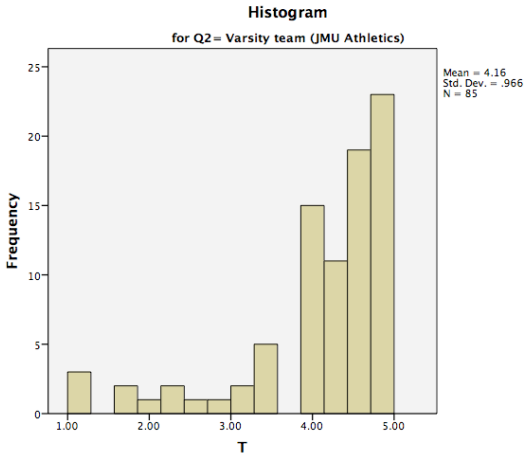


Figure 3.3b: Varsity vs Task subscale

Appendix T: Figures 3.4a and 3.4b

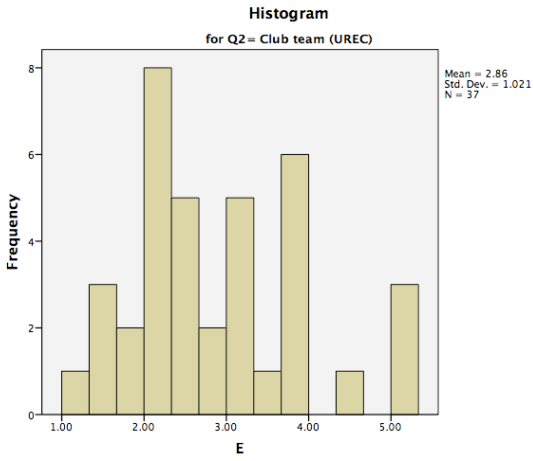


Figure 3.4a: Club vs Ego subscale

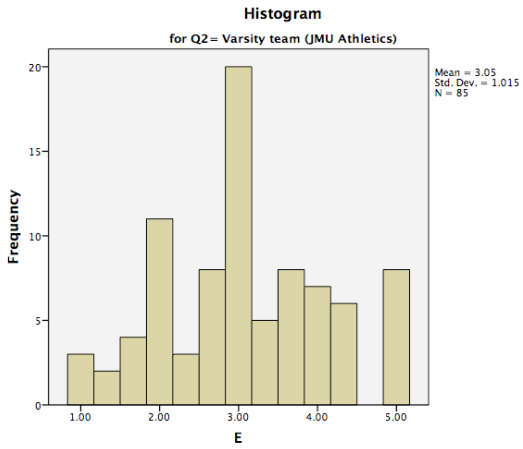


Figure 3.4b: Varsity vs Ego subscale